Media Arts and Sciences (Extended Reality Technologies), MS

HIDGCERTMS

Immerse yourself in the creation of content, software and hardware for virtual, augmented and mixed realities. This transdisciplinary program prepares you for a wide variety of careers in emerging media through connections to industry and community partners in the curriculum.

Program description

Degree awarded: MS Media Arts and Sciences (Extended Reality Technologies)

The MS program in media arts and sciences with a concentration in extended reality technologies focuses on the development of innovative tools and methodologies for extended reality and immersive technologies, including simulation, visualization, interaction, computer vision, human-computer interaction, experience design, artificial intelligence and machine learning.

Students develop a fundamental understanding of how emerging media technologies can be used to create virtual worlds that simulate the existing world alongside entirely new ones. In addition, students develop skills in programming languages and software applications necessary to these production workflows, and they have the ability to manage projects; work effectively in collaborative teams; transform research into creative and technological products; and reflect on the ethical, cultural and social frameworks within which their work occurs.

This program is unique among emerging media programs through the application of these technologies and practices in socially engaged and transdisciplinary modalities, taking tools that evolved primarily from and for entertainment and applying them to the modeling of real-world challenges and futures.

At a glance

• College/School: Herberger Institute for Design and the Arts

• Location: ASU at Mesa City Center

Degree requirements

33 credit hours including the required applied project course (AME 593)

Required Core (9 credit hours)

AME 520 Movement and Computing (3)

AME 530 Philosophy of Media Technology (3)

AME 532 Creating Interactive Media (3)

Concentration (9 credit hours)

AME 550 Prototyping Futures (3)

AME 551 Designing Extended-Reality Experiences (3)

HDA 581 Emerging Media Colloquium (3)

Electives (9 credit hours)

Other Requirements (3 credit hours)

AME 584 Internship (3)

AME 590 Reading and Conference (3)

AME 592 Research (3)

HDA 580 Practicum (3)

Culminating Experience (3 credit hours)

AME 593 Applied Project (3)

Additional Curriculum Information

For other requirements, students must complete a minimum of three credit hours of faculty-led research (AME 592), individualized instruction (AME 590), the design and implementation of public programs (HDA 580), or an internship (AME 584).

Admission requirements

Applicants must fulfill the requirements of both the Graduate College and the Herberger Institute for Design and the Arts.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in media arts, engineering, design or a related field from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program or a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

- 1. graduate admission application and application fee
- 2. official transcripts
- 3. portfolio
- 4. letter of intent
- 5. resume
- 6. three letters of recommendation
- 7. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide <u>proof of English proficiency</u> regardless of their current residency.

In the letter of intent, applicants should detail their professional goals and the alignment of those goals with the program.

Because of the transdisciplinary nature of the program, portfolio submissions can vary based on the prospective student's background. Materials may illustrate the types of skills the applicant possess. Portfolios can be submitted in the form of a website, photos, video, PDFs and other physical documentation. Examples include games designed and programmed by the applicant, music composed by the applicant, performances (submitted as video), and websites programmed by the applicant.

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about <u>ASU tuition and financial aid</u> options to find out which will work best for them.

Application deadlines

Fall

expand

Career opportunities

Graduates of this program are well prepared for careers in a variety of fields related to the application of extended reality technologies and practices. Virtual and augmented reality have obvious and popular applications in entertainment, gaming, workforce development and research, but alumni of this program also have direct experience with the application of these tools to other areas that can expand their available pathways: urban planning, health care and education, among others. They are ideally suited for the rapidly changing climate of this field.

Contact information