

Public Digital Arts

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Undergraduate certificate: public digital arts

Website: <https://pda.uiowa.edu/>

The curricular goal of the public digital arts certificate program is to give students skills to make works of art that are informed by digital technology, scholarship, and disciplinary tradition. Digital technologies keep transforming how people create, perform, and experience art. At the core of the public digital arts cluster is a commitment to innovation and interdisciplinary collaboration in research, teaching, creative work, and the public expression of the University's creative research and scholarship.

Upon completion of the certificate program, students will be able to develop and realize artistic visions using digital technology and work collaboratively with other artists, engineers, or computer scientists. Most courses will include a public dimension, where projects are shown to a public audience.

The certificate provides the following competencies.

- The ability to think about and develop works of art that use digital technology in creative ways.
- The ability to participate in critical discourse about such artistic works.
- The ability to collaborate across disciplines on artistic projects at the intersection of the physical and digital worlds.
- The ability to use art and digital technology to identify, attract, and interact with audiences in a meaningful and creative way.

The Department of Theatre Arts, which administers the Certificate in Public Digital Arts, partners with the College of Engineering, the Schools of Music and Art and Art History, and the Departments of Computer Science and Cinematic Arts, to offer the certificate.

Programs

Undergraduate Program of Study Certificate

- Certificate in Public Digital Arts

Courses

Public Digital Arts Courses

DIGA:2800 Digital Arts: An Introduction 3 s.h.

Introduction to potential of integrating art with technology to provide a foundation of skills and concepts through hands-on experimentation; lectures and demonstrations introduce key concepts and ideas as well as the history of digital arts; students develop skills that form a foundation for future investigation through labs; work may include using an Arduino, programming, and developing an interface to control a software project; final project is shared with the public in some way; critical discourse in the form of writing assignments allows for reflection and evaluation. GE: Engineering Be Creative. Same as ARTS:2800, CINE:2800, CS:2800, DANC:2800, MUS:2800, THTR:2800.

DIGA:3876 Video for Performance 3 s.h.

Introduction to aesthetics and practical applications of digital media and video design for live performance including content creation, system design, and content optimization for media servers; students create digital video and animations and integrate them into live performance and entertainment events via projections, media servers, and digital displays using QLab Media Server and Adobe Creative Cloud (e.g., Illustrator, Photoshop, Premiere Pro, Audition, After Effects); for those with an interest in designing, creating, and displaying digital media for theatre, dance, concerts, corporate events, gallery installations, VJ sets, and architectural projections. Prerequisites: THTR:3890 or CINE:1834 or CINE:1834. GE: Engineering Be Creative. Same as CINE:3876, DANC:3876, INTM:3876, THTR:3876.

DIGA:3880 Installations and Interactive Performance 3 s.h.

Introduction to aesthetics, techniques, and practical possibilities of fusing together theatre, dance, music/sound, art, design, cinema, gaming, human computer interaction, and engineering; foundations of creating interactive experiences that use digital photos, video, text, real-world objects, sensor data, live bodies moving in space, Kinect 2 sensors, cameras, and multiple video outputs (e.g., projectors, LED displays); use of Isadora, an interactive, node-based programming software, to create immersive mediated performances, interactive installations, embodied user-based experiences, and user-manipulated virtual environments. GE: Engineering Be Creative. Same as DANC:3880, INTM:3880, THTR:3880.

DIGA:3890 Producing and Directing Digital Video 3 s.h.

Introduction to the basic concepts, theories, and practical applications of digital video production for multiple distribution streams, with a focus on aesthetic and technical principles; focus on developing proficiency in contemporary approaches to digital media production by understanding the production pipeline, from ideation to preproduction, production, postproduction, and through to distribution. GE: Engineering Be Creative. Same as DANC:3890, INTM:3890, THTR:3890.

DIGA:3895 Performance, Art, and New Technologies in Society 3 s.h.

Survey of major technological innovations that have deeply impacted society and live performance in the late 20th and early 21st century, and the future of the rapidly evolving technological world; students examine theoretical texts and performances that address the impact of technology on the human condition, as well as create original applied live performances and installations; a variety of technologies are explored and adapted for live performance as they relate to the following five categories of original human experience —telepresence, liveness, artificial intelligence, augmented and virtual reality, and transhumanism. Same as DANC:3895, INTM:3895, THTR:3895.