



Office of Admissions  
110 Meyerson Hall  
Philadelphia, PA 19104-6311

## **TIME BASED AND INTERACTIVE MEDIA CERTIFICATE PROGRAM**

The Time Based and Interactive Media Certificate Program is suited for graduate students and professionals who wish to develop skills with the moving image, digital technology and interactivity. The curriculum will enable applicants to engage in new technologies and skills that could be incorporated into their practice, or extend their knowledge to improve their career opportunities.

The program track requires 5 CU's (course units) of electives to be completed within six semesters to earn the certificate. All applicants must have a baccalaureate degree to be considered for admission. Applications for spring admission are due on November 1 and for fall admission on January 14. An application and interview are required. Applicants who are not enrolled in PennDesign graduate programs must submit portfolios containing slides, digital images, printed images, books, video, or interactive projects. Digital and video portfolios should follow the guidelines for the MFA portfolios. Video should be limited to excerpts which total less than 10 minutes. All interactive and time-based projects should include synopses or guides for interaction. Web sites and interactive projects must include a list of technical requirements. Portfolios will be returned only if a properly stamped and return-addressed envelope is included. While taking all reasonable care, the school cannot be held responsible for any damage to the work or portfolio.

## **CONTACT**

Inquiries relating to admission should be directed to:

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Prospective applicants wishing to contact the Department of Fine Arts directly, may contact:

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## **TIME BASED AND INTERACTIVE MEDIA CERTIFICATE PROGRAM ELECTIVE COURSES**

DSGN 5004 Art of the Web: Interactive Concepts for Art & Design  
DSGN 5005 3-D Computer Modeling/Dig. Sculpture  
DSGN 5012 Environmental Animation  
DSGN 5021 Information Design and Visualization  
DSGN 5022 Interfacing Cultures  
DSGN 5023 User Experience (UX) and User Interface (UI) Design  
FNAR 5004 Video I  
FNAR 5007 Digital Photography  
FNAR 5008 Mixed Media Animation  
FNAR 5015 Documentary Video  
FNAR 5016 Video II  
FNAR 5017 Cinema Production  
FNAR 5018 Advanced Video Projects  
FNAR 5021 Advanced Lens Based Projects  
FNAR 5022 Performance/Camera: Performance and-with-through-for Cameras  
FNAR 5023 Performance Studio  
FNAR 5024 Hand-Drawn Animation  
FNAR 5025 Computer Animation  
FNAR 5048 Nonhuman Photography  
FNAR 5049 Machine for Seeing: Architecture & the Moving Image  
FNAR 5066 Advanced Projects: Animation  
ARCH 7430 Form and Algorithm  
ARCH 7440 Post-Digital Craft

## **APPROVAL OF ELECTIVES AND RECOMMENDED SEQUENCE**

The selection and sequence of the elective courses must be approved by the Director of the Time-Based and Interactive Media Certificate program.

## **ELECTIVE COURSE DESCRIPTIONS**

### **DSGN 5004 Art of the Web: Interactive Concepts for Art & Design**

Art of the Web: Interactive concepts for art and design is a first step in learning how to create, analyze and discuss interactive content, as a visual creator. It is an exploration of the culture of the internet, the ideas behind its quirks, the dreams and freedoms it encapsulates, and the creative power it gives to us. Students will be assigned projects that will challenge their current understanding of the web, and the ways it shapes human connectivity and interaction. Upon completion of this course, students will possess a working knowledge how to organize and design websites and learn to critique web-content including navigation, UX design and information architecture. The course will require analytical and conceptual skills and foster creative thinking. \*Course fulfills Integrative Design Studio requirement.

### **DSGN 5005 3-D Computer Modeling/Dig. Sculpture**

Students will develop a comprehensive knowledge of how virtual worlds are constructed using contemporary computer graphics technique with a fine arts perspective. The course will offer the opportunity to explore the construction, texturing, and rendering of forms, environments, and mechanisms while conforming to modeling specifications required for animation, real-time simulations or gaming environments, and rapid prototyping.

### **DSGN 5012 Environmental Animation**

This studio-based course examines the disciplinary spaces of landscape, art, and architecture through the medium of 3D animation and storytelling. We immerse ourselves in environments that may be as small as a cell or as large as a planet. From the refiguring of images, models, graphic design, or video to visualization or coding the genesis of whole environments, this course will allow for a variety of entry point for students of different disciplines and skill levels. Projects will range in scope from animated GIFs to animated shorts.

### **DSGN 5021 Information Design and Visualization**

Information design and visualization is an introductory course that explores the structure of information (text, numbers, images, sounds, video, etc.) and presents strategies for designing effective visual communication appropriate for various users and audiences. The course seeks to articulate a vocabulary of information visualization and find new design forms for an increasingly complex culture.

### **DSGN 5022 Interfacing Cultures: Designing for Mobile, Web and Public Media**

This course introduces advanced topics related to contemporary media technologies, ranging from social media to mobile phones applications and urban interfaces. Students learn how to use new methods from interaction design, service design, and social media and work towards prototyping their ideas using new platforms and media. The class will cover a range of topics such as such as online-gaming, viral communication, interface culture, networked environments, internet of things and discuss their artistic, social, and cultural implications to the public domain.

### **DSGN 5023 User Experience (UX) and User Interface (UI) Design**

Great user experience and user interface design are essential for creating digital products that people love. In this course, we'll cover a range of topics from user research through designing visual interfaces, as well as principles of human-centered design and the design process. We'll study existing products to understand the problems they solve and the elements that make them succeed. Lectures and coursework will include practical exercises with user journeys, flowcharts, style sheets, and prototyping tools. No design experience necessary.



#### **FNAR 5004 Video I**

In this studio-based course, students are introduced to video production and postproduction as well as to selected historical and theoretical texts addressing the medium of video. Students will be taught basic camera operation, sound recording and lighting, as well as basic video and sound editing and exporting using various screening and installation formats. In addition to a range of short assignment-based exercises, students will be expected to complete three short projects over the course of the semester. Critiques of these projects are crucial to the course as students are expected to speak at length about the formal, technical, critical and historical dimensions of their works. Weekly readings in philosophy, critical theory, artist statements and literature are assigned. The course will also include weekly screenings of films and videos, introducing students to the history of video art as well as to other contemporary practices.

#### **FNAR 5007 Digital Photography**

This class offers an in-depth technical and conceptual foundation in digital imagery and the opportunity to explore the creative, expressive possibilities of photography. Students will become proficient with the basic use of the camera, techniques of digital capture, color management and color correction. They will also develop competency in scanning, retouching, printing and a variety of manipulation techniques in Photoshop. Through weekly lectures and critiques, students will become familiar with some of the most critical issues of representation, consider examples from photo history, analyze the impact of new technologies and social media. With an emphasis on structured shooting assignments, students are encouraged to experiment, expand their visual vocabulary while refining their technical skills. No previous experience is necessary. Although it is beneficial for students to have their own Digital SLR camera, registered students may reserve and checkout Digital SLR cameras and other high-end equipment from the department.

#### **FNAR 5008 Mixed Media Animation**

Mixed Media Animation is a contemporary survey of stop-motion animation concepts and techniques. Students use digital SLR cameras, scanners and digital compositing software to produce works in hand-drawn animation, puppet and clay animation, sand animation, and multiplane collage animation. Screenings and discussions in the course introduce key historical examples of animation demonstrating how these techniques have been used in meaningful ways. Students then learn how to composite two or more of these methods with matte painting, computer animation or video.

#### **FNAR 5015 Documentary Video**

Documentary Video is an intensive production course involving the exploration of concepts, techniques, concerns, and aesthetics of the short form documentary. Building on camera, sound, and editing skills acquired in Video I, students will produce a portfolio of short videos and one longer project over the course of the semester using advanced level camera and sound equipment. One short presentation on a genre, technique, maker, or contemporary concern selected by the student is required.

#### **FNAR 5016 Video II**

This course is structured to create a focused environment and support for individual inquiries and projects. Students will present and discuss their work in one to one meetings with the instructor and in group critiques. Readings, screenings, and technical demonstrations will vary depending on students' past history as well as technical, theoretical, and aesthetic interests.



### **FNAR 5017 Cinema Production**

This course focuses on the practices and theory of producing narrative based cinema. Members of the course will become the film crew and produce a short digital film. Workshops on producing, directing, lighting, camera, sound and editing will build skills necessary for the hands-on production shoots. Visiting lecturers will critically discuss the individual roles of production in the context of the history of film.

### **FNAR 5018 Advanced Video Projects**

This course is structured to create a focused environment and support for individual inquiries and projects. Students will present and discuss their work in one on one meetings with the instructor and in group critiques. Readings, screenings, and technical demonstrations will vary depending on students' past history as well as technical, theoretical, and aesthetic interests. Course approval will be based on application prior to the beginning of the semester.

### **FNAR 5021 Advanced Lens Based Projects**

Advanced Lens Based Projects (ALBP) is structured to create an open environment for students to develop a series of self-determined projects using any variety of image capture technologies. Mobile devices and DSLRs have blended the function of moving and still image capture while computers have become ubiquitous as instruments of display and dissemination. This has consequently led to the increasingly collapsed boundaries of artistic mediums. ALBP is a studio class where students will explore different modes of production and address the expanding field of exhibition strategies. Additionally, the class will foster a transdisciplinary approach to critiquing work and emphasize the shared context of the works reception. Readings, screenings, discussions, and critiques make up the curriculum along with dedicated studio time. Each student is required to complete three self-determined projects using still or moving image capture technologies. Grades will be determined through participation, completion of assignments, and the students' formal and critical engagement with the technology. While the focus of this course is not technical, prior knowledge of camera functions and post-production techniques is expected.

### **FNAR 5022 Performance/Camera: Performance and-with-through-for Cameras**

This intermediate course will explore the wide and expansive territories of art-making that exist between live performance and mediated image making-both still and moving. For much of the 21st century, the mediums of performance, video and photography have been weaving in and out of contact. Performance is known and understood largely through its documentation: sometimes voluminous and sometimes little more than a single photograph. On the other side, video, film and photography each developed through widespread explorations that were deeply entwined with the "capturing" of bodies on film. Using photography, video and performance in equal parts, the course is a hands-on exploration of this capacious terrain. The course will be structured by a series of biweekly assignments that allow for individual and collective production. The course will also include a regular schedule of short readings and presentations/screenings of existing works.

### **FNAR 5023 Performance Studio**

This course supports the individual and collaborative production of performance works. As the medium of performance consists of diverse forms, actions, activities, practices and methodologies, the course allows for an open exploration in terms of material and form. Students are invited to utilize technologies, materials and methodologies from other mediums and/or disciplines such as video, photography, writing and sound. In addition to the production component, the course will examine multiple histories of performance through readings, screenings and directed research.



### **FNAR 5024 Hand-Drawn Computer Animation**

Using software tools designed for hand-drawn animation, students will develop animation skills applicable to all forms of animation. In this course students will learn to draw with a sense of urgency and purposefulness as they represent motion and drama in a series of frames. Through careful study of natural movements, precedents in the history of animation, and through the completion of a series of animation projects students will develop strategies for representing naturalistic movement, inventing meaningful transformations of form, and storytelling.

### **FNAR 5025 Computer Animation**

Through a series of studio projects this course introduces techniques of 2D and 3D computer animation. Emphasis is placed on time-based design and storytelling through animation performance and montage. Students will develop new sensitivities to movement, composition, cinematography, editing, sound, color and lighting.

### **FNAR 5048 Nonhuman Photography**

Our culture is increasingly made up of nonhuman actors. Facial recognition algorithms spend more hours “seeing” in a day than humans; drones equipped with visual sensors conduct our warfare; voice chat bots call businesses and make appointments for us. Meanwhile, humans conduct labor that we view as the work of bots: posting disinformation for political gain, or mass-producing children’s YouTube videos for ad revenue. As objects begin to see and think, how can we understand the role of human agency and the possibilities (or lack thereof) for artistic expression in this space? What does the future of art look like when more photographs are taken as surveillance than by individuals, or when important cultural producers are nonhuman intelligences? In Nonhuman Photography, we will attempt to interrogate these ideas from an artist’s perspective, approaching nonhuman agents and the various components that comprise them both as tools for studio work and as generative entities in their own right. Over the course of the semester we will read and discuss these issues extensively, while engaging in studio projects in a variety of media. While the course bears the title “photography”, we will find that many of these tools will be non-photographic or para-photographic, and as a result many of our studio projects will be interdisciplinary. This course takes its name from Joanna Zylińska’s Nonhuman Photography, parts of which we will examine over the course of the semester.

### **FNAR 5049 Machine for Seeing: Architecture & the Moving Image**

Architecture’s relationship with cinema was established with the very first motion picture. In *Sortie de l’usine Lumière de Lyon* by Auguste and Louis Lumière we see a didactic presentation of the films title as workers from the Lumière brothers factory stream forth from it’s interior at days end. In many ways the context of the film is its subject as well. The title of the class plays on Le Corbusier’s maxim that architecture is machine for living and perhaps cinema is simply a machine for helping us understand the vast construct of our built environment. A device, which allows us to imagine even greater follies or more importantly to think critically about architectures relationship with and impact on society. Readings, screenings, discussions and critiques make up the curriculum along with studio time. Students will produce their own film and we’ll look at films produced by a range of practitioners: From architects speculating on the nature and use of public space and urban development to documentarians researching the pathologies of neo-liberalism and its effect on the privatization of space. We’ll also look at the work of artists who engage with the poetics of space and who unpack the conflicted legacies of the built environment.

### **FNAR 5066 Advanced Projects in Animation**

Through a series of studio projects, this course will focus on advanced concepts in 3D computer animation and 2D compositing. The courses will cover advanced techniques for rigging animated characters or structures, shading 3D forms, working with dynamic simulations, rendering projects, and compositing complex shots. Topics discussed will include production pipelines, motion-capture, and methods of developing ideas for animation. The schedule of the course will lend itself to allowing members to complete ambitious self-conceived animation projects.



### **ARCH 7430 Form and Algorithm**

The critical parameter will be to develop the potential beyond finite forms of explicit and parametric modeling towards non-linear algorithmic processes. We will seek novel patterns of organization, structure, and articulation as architectural expressions within the emergent properties of feedback loops and rule-based systems. This seminar will accommodate both introductory and advanced levels. No previous scripting experience is necessary. It will consist of a series of introductory sessions, obligatory intensive workshops, lectures followed by suggested readings, and will gradually focus on individual projects. Students will be encouraged to investigate the limits of algorithmic design both theoretically and in practice through a scripting environment.

### **ARCH 7440 Postdigital Craft**

As we have entered a postdigital era, the dominance of a purely technological approach as a vehicle for design innovation has waned. Questions of substance and disciplinary autonomy have found their way back into the contemporary cultural discourse, enriching the way we examine and deploy advanced technologies towards novel expressions in architecture. This seminar will investigate, through the production of estranged objects, opportunities for design that are being generated at the intersection of machinic and human minds, and speculate on possible futures in which concepts of nature and technology have been inseparably intertwined.