

DIGITAL ARTS AND MEDIA DESIGN, B.DES.

Begin Campus: University Park

End Campus: University Park

Program Description

The Bachelor of Design (B.Des.) in Digital Arts and Media Design (DART) is a multidisciplinary digital arts and design undergraduate degree in the College of Arts and Architecture's School of Visual Arts. Digital Arts and Media Design approaches design through the lens of the visual arts, as a critical, creative, and experimental studio-based practice. The major prepares students to become leaders in digital media fields where their commanding knowledge of emerging technologies allows them to contribute and innovate in creative media design careers.

Students' progress through a series of core courses in which they develop research, design, and computational skills to enhance their capacity for critical thinking. In addition to these core experiences, students hone creative thinking capabilities in a range of studio-based digital art and design courses. In the final year of study, students work rigorously on a senior thesis project based on topics of personal interests and areas of intensive study in the digital arts. A purpose of the thesis is to prepare students to meet the varying challenges they will face as digital art and design professionals.

Students may choose from one of three primary tracks in the program:

1. **Digital Art and Digital Design Emphasis:** In this track students create individualized 2d-3d digital arts and design learning paths that may include UX/UI design (user experience/user interface), visual concept art and design, 3d modeling and digital fabrication, 2d-3d digital imaging and computer graphics, as well as the most recent emerging forms of digital art and design.
2. **Interactive Media Emphasis:** In this track students create individualized learning paths for interactive media design. Students learn computational skills as visual thinkers, designing increasingly complex interactive experiences individually and in teams. Students take courses in game art, game design, physical computing, mobile and web design, virtual worlds, interactive media design, data visualization and cultural analytics.
3. **Time Based Media Emphasis:** In this track students create individualized learning paths for 2d and 3d time based digital arts and media design including motion graphics, animation, computer graphics and pre-visualization as well as video compositing.

What is Digital Arts and Media Design?

Digital Arts and Media Design uses digital arts technologies in studio-lab settings to challenge young artists and designers to expand their ideas as they explore new languages of visual expression and communication. Following familiar studio ways of thinking and making traditionally associated with practices such as mixing pigments in painting, or shaping clay in ceramics, digital artists manipulate computer software through coding to expand the potential for creating new forms of image making. In an electronic environment, the single work of art may be replaced by multiple copies that are cloned and reworked using a range of image-making systems. Digital artworks may be exhibited in a variety of forms, such as digital prints, computer printouts, or other hard copy formats of any scale where each translation offers different

interpretations. Digital art may also be encountered through networks, interactive games, simulations, or as immersive environments that require active participation by a viewer.

You Might Like This Program If...

Your curiosity and creativity is stimulated by thinking visually in computer languages and graphic communication, and you are inspired by the thought that a digital device is a flexible and adaptive 'studio' space where you come up with your best ideas. You will plan and apply your creative design skills in a climate of invention and collaboration in interdisciplinary projects that explore changing visual technologies in art and design.

Entrance Procedures

Incoming First Year Students

Incoming first year students must apply to Penn State. Students who are accepted to DART through the undergraduate admissions application will be admitted to the School of Visual Arts pre-major (AAART). Students will submit a portfolio for entrance to DART (B.DES) major at the end of their 2nd semester.

Change of Major/Change of Campus Students

Change of major/Change of Campus students must have a cumulative GPA of 2.00 or above and are required to submit a portfolio to enter the AAART pre-major. Portfolios to enter pre-major are submitted through Slideroom (<https://psu.slideroom.com/#/Login>) and are reviewed on a rolling basis. Portfolios should include 10-12 images of the applicant's work and a statement (500-word max) to describe one of the artworks. Students will submit a portfolio for entrance to DART (B.DES) major at the end of their 2nd semester in AAART.

Transfer Students

Transfer students must apply for undergraduate admissions to Penn State. Undergraduate applications for admission to Penn State must be complete and submitted before uploading the required portfolio for entry to AAART pre-major. Portfolios are submitted through Slideroom (<https://psu.slideroom.com/#/Login>) and are reviewed on a rolling basis and should include 10-12 images of the applicant's work and a statement (500-word max) to describe one of the artworks. Students will submit a portfolio for entrance to DART (B.DES) major at the end of their 2nd semester in AAART.

Degree Requirements

For the Bachelor of Design degree in Digital Arts and Media Design, a minimum of 121 credits is required:

Requirement	Credits
General Education	45
Electives	0-3
Requirements for the Major	82

0-9 of the 45 credits for General Education are included in the Requirements for the Major. This includes up to 0-6 credits of GA courses and 0-3 credits of GQ courses.

Requirements for the Major

A grade of C or better is required for all courses in the major. To graduate, a student enrolled in the major must earn at least a C grade in each course designated by the major as a C-required course, as specified

by Senate Policy 82-44 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44>).

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better</i>		
ART 11	First-Year Seminar- School of Visual Arts	1
ART 110	Ideas as Visual Images	3
ART 111	Ideas as Objects	3
ART 211Y	Introduction to Digital Art and Design Criticism	3
ART 476	History and Theory of Digital Art	3
DART 100	Introduction to Digital Art & Media Design	3
DART 200	Creative Research in Digital Arts & Media Design	3
DART 201	Focused Realization Studio	3
DART 202	2D Digital Art & Computer Graphics	3
DART 203	3D Digital Art & Design Fundamentals	3
DART 204	Animation Fundamentals	3
DART 205	Creative Coding: Scripting for Art and Design	3
DART 300	Digital Portfolio Elements	3
DART 301	Creative Collaboration Studio	4
DART 400	Digital Arts & Media Design Capstone I	4
DART 401	Digital Art & Media Design Capstone II	4
DART 495	Internship	3
Additional Courses		
<i>Additional Courses: Require a grade of C or better</i>		
Select one of the following emphasis areas:		19-21
<i>Digital Art and Design Emphasis</i>		
ART 220	Figure Drawing	
DART 213	3D Printing for Artists and Designers	
DART 302	Digital Painting Studio	
DART 303	3D Studio	
DART 304	Motion Graphics Studio	
PHOTO 202	Fundamentals of Professional Photography	
<i>Interactive Media Emphasis</i>		
DART 206	Web Design and Visual Web Development	
DART 305	Mobile and Touch Studio	
DART 315	Game Studio	
DART 405	Physical Computing Studio	
DART 406	Advanced Web and Multimedia Publishing Studio	
<i>Time Based Media Emphasis</i>		
DART 302	Digital Painting Studio	
DART 303	3D Studio	
DART 304	Motion Graphics Studio	
DART 314	Video Art and Time-Based Media	
DART 404	Animation Studio	
Select 9-11 credits from the following list of courses in consultation with faculty adviser:		9-11
AA 121	Design Thinking and Creativity	
AA 122	Introduction to Graphic Storytelling	
AA 193N	The Craft of Comics	
ART 101	Introduction to Web Design	
ART 220	Figure Drawing	
ART 250	Beginning Oil Painting	

ART 260	Water Media
ART 320	Advanced Drawing
ART 343	New Media Printmaking
ART 350	Intermediate Painting
CMPSC 101	Introduction to Programming
CMPSC 102	Introduction to Visual Programming
CMPSC 121	Introduction to Programming Techniques
CMPSC 131	Programming and Computation I: Fundamentals
COMM 242	Basic Video/Filmmaking
DART 206	Web Design and Visual Web Development
DART 213	3D Printing for Artists and Designers
DART 296	Independent Studies
DART 297	Special Topics
DART 302	Digital Painting Studio
DART 303	3D Studio
DART 304	Motion Graphics Studio
DART 305	Mobile and Touch Studio
DART 314	Video Art and Time-Based Media
DART 315	Game Studio
DART 404	Animation Studio
DART 405	Physical Computing Studio
DART 406	Advanced Web and Multimedia Publishing Studio
DART 410	Integrating Media: Convergence in Practice
DART 495	Internship
DART 496	Independent Studies
DART 497	Special Topics
GD 100	Introduction to Graphic Design
GD 200	Graphic Design Studio I
GD 201	Typography
GD 203	Typography 2
INART 258A	Fundamentals of Digital Audio
IST 140	Introduction to Application Development
MUSIC 455	Technology in Music
MUSIC 458	Electronic Music Composition I
PHOTO 100	Introduction to Photography
PHOTO 101	Culture of Photography
PHOTO 202	Fundamentals of Professional Photography
PHOTO 300	Photo Studio II
PHOTO 303	Professional Photography: Studio Technique and Photocomposition
PHOTO 400	Digital Photography in the Studio
PHOTO 402	Photographic Narratives
PHOTO 404	Professional Photography Capstone Seminar: Self-Marketing and Professional Presence
THEA 285	Introduction to Sound Design
THEA 484	Sound Recording Techniques

General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate

students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<https://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)

- **Quantification (GQ):** 6 credits
- **Writing and Speaking (GWS):** 9 credits

Breadth in the Knowledge Domains (Inter-Domain courses do not meet this requirement.)

- **Arts (GA):** 3 credits
- **Health and Wellness (GHW):** 3 credits
- **Humanities (GH):** 3 credits
- **Social and Behavioral Sciences (GS):** 3 credits
- **Natural Sciences (GN):** 3 credits

Integrative Studies

- **Inter-Domain Courses (Inter-Domain):** 6 credits

Exploration

- **GN,** may be completed with Inter-Domain courses: 3 credits
- **GA, GH, GN, GS, Inter-Domain courses.** This may include 3 credits of World Language course work beyond the 12th credit level or the requirements for the student's degree program, whichever is higher: 6 credits

University Degree Requirements

First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

Cultures Requirement

6 credits are required and may satisfy other requirements

- United States Cultures: 3 credits
- International Cultures: 3 credits

Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80>)). For more information, check the Suggested Academic Plan for your intended program.

Learning Outcomes

- Demonstrate skills in visual thinking, computer programming, and graphic communication fostered in a climate of invention and collaboration by exploring digital media in studies of technology, theory, and culture;
- Apply diverse notions of creativity in the development and application of design practices through testing, prototyping, and applying original ideas to computational projects in a variety of digital media;
- Demonstrate an ability to produce convincing visual design applied to code-based animations, interactive applications and games.
- Participate in class discussions and critiques that demonstrate critical awareness of new media/digital arts discourse and practices;
- Develop the technical capabilities and creative dispositions to successfully pursue career pathways in multimedia digital art and design;
- Participate in a community of discourse using skills in reading, analyzing, and discussing material about new media theory and practice, leading to constructive criticism of projects and presentations of peers.

Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

University Park

Liz Agler

Academic Adviser
104 Borland Building
University Park, PA 16802
814-865-9523
ect113@psu.edu

Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2023-24 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition (*Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin*).

Digital Arts and Media Design, B.Des. at University Park Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year		
Fall	Credits Spring	Credits
ART 11*	1 ART 111*	3
ART 110*	3 DART 203, 204, or 205*	3
DART 100*	3 General Education Course	3
DART 202*	3 General Education Course	3
GQ [#]	3 General Education Course	3
ENGL 15, 15A, or 30H [†]	3	
	16	15
Second Year		
Fall	Credits Spring	Credits
DART 200*	3 DART 201	3
DART 203, 204, or 205*	3 DART 203, 204, or 205*	3
ART 211Y*	3 Additional Courses ^{*1}	4
CAS 100 [†]	3 GQ ^{††1}	3
General Education Arts (GA) ^{**†1}	3 General Education Course	3
	15	16
Third Year		
Fall	Credits Spring	Credits
DART 300*	3 DART 301	4
DART 495*	3 ART/ARTH 476	3
Additional Courses ^{*1}	3-4 Additional Courses ^{*1}	3-4
Additional Courses ^{*1}	3-4 General Education Course	3
ENGL 202 [†]	3 General Education Course	3
	15-17	16-17
Fourth Year		
Fall	Credits Spring	Credits
DART 400*	4 DART 401*	4
Additional Courses ^{*1}	3-4 Additional Courses ^{*1}	3-4
Additional Courses ^{*1}	3-4 General Education Course	3
General Education Arts (GA) ^{**†1}	3 General Education Course	3

Elective

3

13-15

16-17

Total Credits 122-128

- * Course requires a grade of C or better for the major
- ‡ Course requires a grade of C or better for General Education
- # Course is an Entrance to Major requirement
- † Course satisfies General Education and degree requirement

¹ Select one of the following emphasis areas:

- A. **Digital Art and Design Emphasis (21 credits):** ART 220 (3), DART 213 (3), DART 302 (4), DART 303 (4), DART 304 (4), PHOTO 202 (3);
- B. **Interactive Media Emphasis (19 credits):** DART 206 (3), DART 305 (4), DART 315 (4), DART 405 (4), DART 406 (4);
- C. **Time Based Media Emphasis (20 credits):** DART 302 (4), DART 303 (4), DART 304 (4), DART 314 (4), DART 404 (4)

AND

Select 9-11 credits from the following list of courses in consultation with faculty adviser:

(AA 121 GA(3); AA 122 (3); AA 193N GA; GH(3); ART 101 GA(3); ART 220 (3); ART 250 (3); ART 260 (3 max:6); ART 320 (4 max:8); ART 343 (4 max:8); ART 350 (4 max:8); COMM 242 (3); CMPSC 101 GQ(3); CMPSC 102 (3); CMPSC 121 GQ(3), CMPSC 131 (3); DART 206 (3); DART 213 (3); DART 302 (4); DART 303 (4 max:8); DART 304 (4); DART 305 (4); DART 314 (4 max:8); DART 315 (4 max:8); DART 404 (4 max:8); DART 405 (4 max:8); DART 406 (4 max:8); DART 410 (4 max:8); DART 297 (1-9); DART 497 (1-9); DART 495 (1-18); DART 296 (1-18); DART 496 (1-18); GD 100 GA(3); GD 200 (3); GD 201 (3); GD 203 (3); IST 140 (3), INART 258A GA(3); MUSIC 455 (1-3); MUSIC 458 (3); PHOTO 100 GA(3); PHOTO 101 GA(3); PHOTO 202 (3); PHOTO 300 (4); PHOTO 303 (3 max:6); PHOTO 400 (4); PHOTO 402 (4 max:8); PHOTO 404 (4); THEA 285 (3); THEA 484 (3))

Total number of credits in Additional Courses must equal 30, so student must select sufficient courses in consultation with adviser to make up the difference between the credits required for their chosen emphasis area (19-21 credits) and the total of 30.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will

replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C.
Each course is 3 credits.

<https://arts.psu.edu/academics/school-of-visual-arts/>

Career Paths

The DART program explores and applies digital arts technologies to challenge your curiosity and creativity by expanding how you might think in a digital studio space as you develop new languages of visual expression and communication. Skills in visual thinking, computer programming, graphic communication, and interactive systems are core competencies that have universal application in multiple places of learning, culture, business, entertainment, and industry and are highly prized capabilities. Our goal is to meet your technical, creative, and intellectual needs to ensure you have multiple career options to pursue in creative fields and within the cultural economy.

Careers

In the DART program, we foster a climate of creative intervention, collaboration, and critique, but you provide the motivation. A sequence of 'spine' courses anchors the curriculum around essential learning in integrating digital art processes in 2-D, 3-D, and 4-D art and design. However, these courses are envelopes of processes and practices that are animated by you and the ideas that excite you. DART faculty are professional artists and cultural commentators who work in digital media in varied forms to help mentor and guide you in portfolio and project development, internship options, and how to gain access to collaborative opportunities throughout campus.

Opportunities for Graduate Studies

Creative and critical independence is a hallmark of professional practice and the DART capstone project is modeled as a bridging experience for entry into the profession, or as a sample of self-directed learning encountered in graduate school. Professional opportunities open to you as an DART graduate include all areas of new imaging technologies, such as web-based design and communications, entertainment arts, marketing, 3-D modeling and animation, interface design, video and motion graphics, interactive media, and game development. You too will have the capacity to join the many graduates that are practicing digital artists and designers in multiple fields, or have continued on to advanced degrees.

MORE INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES
(<https://arts.psu.edu/degrees/master-of-fine-arts-in-art/>)

Professional Resources

- College Art Association (<https://www.collegeart.org>)
- National Art Education Association (<https://www.arteducators.org>)
- National Council of Art Administrators (<https://www.ncaaarts.org/>)
- Pennsylvania Art Education Association (<https://sites.google.com/paea.org/paea/home/>)
- Association for Computing Machinery (ACM) SIGGRAPH (<https://www.siggraph.org/>)

Contact

University Park

SCHOOL OF VISUAL ARTS
210 Patterson Building
University Park, PA 16802
814-865-0444
AAUG@psu.edu