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:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>45</td>
</tr>
<tr>
<td>Electives</td>
<td>0-3</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>82</td>
</tr>
</tbody>
</table>

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.

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

**Knowledge Domains**
- Arts (GA): 6 credits
- Health and Wellness (GHW): 3 credits
- Humanities (GH): 6 credits
- Social and Behavioral Sciences (GS): 6 credits
- Natural Sciences (GN): 9 credits

**Integrative Studies (may also complete a Knowledge Domain requirement)**
- Inter-Domain or Approved Linked Courses: 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 (http://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.

**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 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 11</td>
<td>First-Year Seminar- School of Visual Arts</td>
<td>1</td>
</tr>
<tr>
<td>ART 110</td>
<td>Ideas as Visual Images</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Ideas as Objects</td>
<td>3</td>
</tr>
<tr>
<td>ART 211Y</td>
<td>Introduction to Digital Art and Design Criticism</td>
<td>3</td>
</tr>
<tr>
<td>ART 476</td>
<td>History and Theory of Digital Art</td>
<td>3</td>
</tr>
<tr>
<td>DART 100</td>
<td>Introduction to Digital Art &amp; Media Design</td>
<td>3</td>
</tr>
<tr>
<td>DART 200</td>
<td>Creative Research in Digital Arts &amp; Media Design</td>
<td>3</td>
</tr>
<tr>
<td>DART 201</td>
<td>Focused Realization Studio</td>
<td>3</td>
</tr>
<tr>
<td>DART 202</td>
<td>2D Digital Art &amp; Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>DART 203</td>
<td>3D Digital Art &amp; Design Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>DART 204</td>
<td>Animation Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>DART 205</td>
<td>Creative Coding: Scripting for Art and Design</td>
<td>3</td>
</tr>
<tr>
<td>DART 300</td>
<td>Digital Portfolio Elements</td>
<td>3</td>
</tr>
<tr>
<td>DART 301</td>
<td>Creative Collaboration Studio</td>
<td>4</td>
</tr>
<tr>
<td>DART 400</td>
<td>Digital Arts &amp; Media Design Capstone I</td>
<td>4</td>
</tr>
<tr>
<td>DART 401</td>
<td>Digital Art &amp; Media Design Capstone II</td>
<td>4</td>
</tr>
<tr>
<td>DART 495</td>
<td>Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

**Additional Courses**

Additional Courses: Require a grade of C or better

Select one of the following emphasis areas: 19-21

**Digital Art and Design Emphasis**
- 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

**Interactive Media Emphasis**
- 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

**Time Based Media Emphasis**
with faculty adviser: Select 9-11 credits from the following list of courses in consultation with your academic adviser:

- PHOTO 300: Photo Studio II
- PHOTO 202: Fundamentals of Professional Photography
- PHOTO 101: Culture of Photography
- PHOTO 100: Professional Photography Capstone Seminar: Self-Marketing and Professional Presence
- THEA 285: Introduction to Sound Design
- THEA 484: Sound Recording Techniques

### 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 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/)

### University Park

**Angela Rothrock**  
School of Visual Arts Advising Coordinator  
211 Patterson Building  
University Park, PA 16802  
814-865-0444  
arb184@psu.edu

### Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2020-21 academic year. To access previous years’ suggested academic plans, please visit the archive (https://
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**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 11†</td>
<td>1</td>
<td>ART 111†</td>
<td>3</td>
</tr>
<tr>
<td>ART 110†</td>
<td>3</td>
<td>DART 203, 204, or 205†</td>
<td>3</td>
</tr>
<tr>
<td>DART 100</td>
<td>3</td>
<td>General Education Course</td>
<td>3</td>
</tr>
<tr>
<td>DART 202</td>
<td>3</td>
<td>General Education Course</td>
<td>3</td>
</tr>
<tr>
<td>GQ‡</td>
<td>3</td>
<td>General Education Course</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 15, 15A, or 30‡</td>
<td>3</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DART 200†</td>
<td>3</td>
<td>DART 201</td>
<td>3</td>
</tr>
<tr>
<td>DART 203, 204, or 205†</td>
<td>3</td>
<td>DART 203, 204, or 205†</td>
<td>3</td>
</tr>
<tr>
<td>ART 211Y†</td>
<td>3</td>
<td>Additional Courses †</td>
<td>4</td>
</tr>
<tr>
<td>CAS 100‡</td>
<td>3</td>
<td>GQ‡†</td>
<td>3</td>
</tr>
</tbody>
</table>
| General Education Arts
  (GA)†† | 3       | General Education Course | 3       |
| 15        | 16      | 16-17  | 16-17   |

**Third Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DART 300†</td>
<td>3</td>
<td>DART 301</td>
<td>4</td>
</tr>
<tr>
<td>DART 495†</td>
<td>3</td>
<td>DART 476</td>
<td>3</td>
</tr>
<tr>
<td>Additional Courses †</td>
<td>3-4</td>
<td>Additional Courses †</td>
<td>3-4</td>
</tr>
<tr>
<td>Additional Courses †</td>
<td>3-4</td>
<td>General Education Course</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 202‡</td>
<td>3</td>
<td>General Education Course</td>
<td>3</td>
</tr>
<tr>
<td>15-17</td>
<td>16-17</td>
<td>16-17</td>
<td>16-17</td>
</tr>
</tbody>
</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DART 400†</td>
<td>4</td>
<td>DART 401†</td>
<td>4</td>
</tr>
<tr>
<td>Additional Courses †</td>
<td>3-4</td>
<td>Additional Courses †</td>
<td>3-4</td>
</tr>
<tr>
<td>Additional Courses †</td>
<td>3-4</td>
<td>General Education Course</td>
<td>3</td>
</tr>
</tbody>
</table>
| General Education Arts
  (GA)†† | 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

AND

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

- 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);
- Interactive Media Emphasis (19 credits): DART 206 (3), DART 305 (4), DART 315 (4), DART 405 (4), DART 406 (4);
- Time Based Media Emphasis (20 credits): DART 302 (4), DART 303 (4), DART 304 (4), DART 314 (4), DART 404 (4);

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University 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.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of ‘C’ or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL/CAS 137 in the fall semester and ENGL/CAS 138 in the spring semester. These courses carry the GWS designation and replace both ENGL 30 and CAS 100. Each course is 3 credits.

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://sova.psu.edu/degree/master-fine-arts-art/)

Professional Resources
- College Art Association (http://www.collegeart.org)
- National Art Education Association (https://www.arteducators.org)
- National Council of Art Administrators (http://www.ncaaarts.org)
- Pennsylvania Art Education Association (http://paedblog.org)
- 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
arb184@psu.edu

https://sova.psu.edu