INTERDISCIPLINARY DIGITAL
STUDIO, B.DES.

Begin Campus: University Park
End Campus: University Park

Program Description
This degree represents an interdisciplinary approach to emerging
technologies and the arts and design disciplines of the College of Arts
and Architecture incorporating architecture, landscape architecture,
graphic design, music, photography, theatre design, and visual arts.
The IDS degree begins with a foundation in arts and design [ART 110,
ART 111] a two semester sequence of linked studio practice and theory
courses that cover fundamental ideas and skills in the arts and design
disciplines such as drawing, color theory, and 2-d, 3-d, and 4-d design
within the context of art and design history and theory. The IDS program
builds on this foundational core utilizing selected courses from across
the College of Arts and Architecture. These courses range from digital
fabrication to sound design and composition in music, theatre, and art, to
digitally-based art explorations, to digital photography, to the exploration
of virtual architectural and built environment spaces, to digital art and
design theory and criticism, to internet exhibitions and publishing.
Concurrent with these courses, students progress through the series of
IDS studio courses (AA 110, AA 210, AA 310, AA 410 and AA 411) in which
they will develop ways of learning that will enable them to understand
how to work within collaborative professional environments. This will
prepare students to meet the varying challenges they will face within
client-based arts and design professions.

What is Interdisciplinary Digital Studio?
Interdisciplinary Digital Studio 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 IDS 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 IDS (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 IDS (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 IDS (B.DES) major at the end of their 2nd
semester in AAART.

Degree Requirements
For the Bachelor of Design degree in Interdisciplinary Digital Studio, 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>

Up to 9 of the 45 credits for General Education are included in the
Requirements for the Major. This includes up to 6 credits of GA courses
and 3 credits of GN 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>
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| Prescribed Courses: Require a grade of C or better

<table>
<thead>
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<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AA 105</td>
<td>Interdisciplinary Digital Studio (IDS) Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>AA 106</td>
<td>Interdisciplinary Digital Studio (IDS) Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>AA 110</td>
<td>Interdisciplinary Digital Media Studio I</td>
<td>3</td>
</tr>
<tr>
<td>AA 210</td>
<td>Focused Realization Studio</td>
<td>3</td>
</tr>
<tr>
<td>AA 310</td>
<td>Creative Collaboration Studio</td>
<td>3</td>
</tr>
<tr>
<td>AA 410</td>
<td>Interdisciplinary Digital Studio Capstone I</td>
<td>4</td>
</tr>
<tr>
<td>AA 411</td>
<td>Interdisciplinary Digital Studio Capstone II</td>
<td>4</td>
</tr>
<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>
</tbody>
</table>

Additional Courses

Additional Courses: Require a grade of C or better

Select 40 credits of the following: 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 481</td>
<td>Digital Design Media</td>
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</tr>
<tr>
<td>ART 101</td>
<td>Introduction to Web Design</td>
<td></td>
</tr>
<tr>
<td>ART 201</td>
<td>Intro to Digital Arts: Computer Graphics</td>
<td></td>
</tr>
<tr>
<td>ART 202</td>
<td>Computer 3-Dimensional Modeling and Rendering</td>
<td></td>
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<tr>
<td>ART 203</td>
<td>The Art of Web Design</td>
<td></td>
</tr>
<tr>
<td>ART 314</td>
<td>Computer 3-D: Modeling and Rendering</td>
<td></td>
</tr>
<tr>
<td>ART 315</td>
<td>New Media Art: Modeling, Rendering, and Animation</td>
<td></td>
</tr>
<tr>
<td>ART 316</td>
<td>Video Art and Time-Based Media</td>
<td></td>
</tr>
<tr>
<td>ART 318</td>
<td>New Media Art: Game Art</td>
<td></td>
</tr>
<tr>
<td>ART 319</td>
<td>Physical Computing</td>
<td></td>
</tr>
<tr>
<td>ART 343</td>
<td>New Media Printmaking</td>
<td></td>
</tr>
<tr>
<td>ART 415</td>
<td>Integrating Media: Convergence in Practice</td>
<td></td>
</tr>
<tr>
<td>ART 416</td>
<td>Advanced Web and Net Art: Multimedia Publishing</td>
<td></td>
</tr>
<tr>
<td>ART 419</td>
<td>Advanced New Media: Capstone</td>
<td></td>
</tr>
<tr>
<td>GD 100</td>
<td>Introduction to Graphic Design</td>
<td></td>
</tr>
<tr>
<td>GD 200</td>
<td>Graphic Design Studio I</td>
<td></td>
</tr>
<tr>
<td>INART 50</td>
<td>The Science of Music</td>
<td></td>
</tr>
<tr>
<td>INART 258A</td>
<td>Fundamentals of Digital Audio</td>
<td></td>
</tr>
<tr>
<td>LARCH 450</td>
<td>Geodesign: Geospatial Technology for Design</td>
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</tr>
<tr>
<td>MUSIC 455</td>
<td>Technology in Music</td>
<td></td>
</tr>
<tr>
<td>MUSIC 458</td>
<td>Electronic Music Composition</td>
<td></td>
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<tr>
<td>PHOTO 100</td>
<td>Introduction to Photography</td>
<td></td>
</tr>
<tr>
<td>PHOTO 200</td>
<td>Photo Studio I</td>
<td></td>
</tr>
<tr>
<td>PHOTO 300</td>
<td>Photo Studio II</td>
<td></td>
</tr>
<tr>
<td>PHOTO 400</td>
<td>Digital Photography in the Studio</td>
<td></td>
</tr>
<tr>
<td>PHOTO 402</td>
<td>Photographic Narratives</td>
<td></td>
</tr>
<tr>
<td>THEA 285</td>
<td>Introduction to Sound Design</td>
<td></td>
</tr>
<tr>
<td>THEA 484</td>
<td>Sound Recording Techniques</td>
<td></td>
</tr>
</tbody>
</table>

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better

- **Interdisciplinary Digital Studio, B.Des.**
- **History and Theory of Digital Art**
- **Digital Design Media**
- **Introduction to Web Design**
- **Intro to Digital Arts: Computer Graphics**
- **Computer 3-Dimensional Modeling and Rendering**
- **The Art of Web Design**
- **Computer 3-D: Modeling and Rendering**
- **New Media Art: Modeling, Rendering, and Animation**
- **Video Art and Time-Based Media**
- **New Media Art: Game Art**
- **Physical Computing**
- **New Media Printmaking**
- **Integrating Media: Convergence in Practice**
- **Advanced Web and Net Art: Multimedia Publishing**
- **Advanced New Media: Capstone**
- **Introduction to Graphic Design**
- **Graphic Design Studio I**
- **The Science of Music**
- **Fundamentals of Digital Audio**
- **Geodesign: Geospatial Technology for Design**
- **Technology in Music**
- **Electronic Music Composition**
- **Introduction to Photography**
- **Photo Studio I**
- **Photo Studio II**
- **Digital Photography in the Studio**
- **Photographic Narratives**
- **Introduction to Sound Design**
- **Sound Recording Techniques**


Select 6 credits of the following: 6

- ART 220  Figure Drawing
- ART 411  Seminar in Contemporary Art
- ARTH 250  A Chronological Survey of Photography
  or PHOTO 200  Chronological Survey of Photography
- ARTH 450  The History of Photography
- ARTH 470  Contemporary Art
- INART 55  History of Electroacoustic Music

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
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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 2019-20 academic year. To access previous years’ suggested academic plans, please visit the archive (http://bulletins.psu.edu/undergraduate/archive) to view the appropriate Undergraduate Bulletin edition (Note: the archive only contain suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin).

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>AA 105*</td>
<td>3</td>
<td>AA 106*</td>
<td>3</td>
</tr>
<tr>
<td>ART 11*</td>
<td>1</td>
<td>ART 111*</td>
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<td>ART 110*</td>
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<td>Additional Course for Major (see list)††</td>
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<tr>
<td>ENGL 15, 15A, or 30‡</td>
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<td>General Education Course (IL)</td>
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| Total       | 16      | 15          |

Second Year

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<th>Credits</th>
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<tr>
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<td>AA 210*</td>
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<td>ART 211 (W; US)*</td>
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<td>CAS 100A, 100B, or 100C‡</td>
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<tr>
<td>Supporting Course for Major (see list)‡</td>
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<tr>
<td>General Education Course</td>
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| Total       | 15      | 15          |

Third Year

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<thead>
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<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 202A, 202B, or 202C‡</td>
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<td>AA 310*</td>
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<tr>
<td>Additional Course for Major (see list)†</td>
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<td>Additional Course for Major, 400-level (see list)††</td>
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<tr>
<td>Additional Course for Major (see list)†</td>
<td>3</td>
<td>Additional Course for Major (see list)†</td>
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<tr>
<td>General Education Course</td>
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<td>General Education Course</td>
<td>3</td>
</tr>
<tr>
<td>Supporting Course for Major, history of the arts (see list)‡</td>
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<tr>
<td>General Education Course</td>
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| Total       | 15      | 15          |

Fourth Year

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<th>Fall</th>
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<th>Spring</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AA 410*</td>
<td>4</td>
<td>AA 411*</td>
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<tr>
<td>ART 476*</td>
<td>3</td>
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<tr>
<td>Additional Course for Major (see list)†</td>
<td>3</td>
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</tr>
</tbody>
</table>
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 iDS 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. iDS 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 iDS 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 iDS 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](https://sova.psu.edu/degree/master-fine-arts-art))

**Professional Resources**

- College Art Association ([http://www.collegeart.org](http://www.collegeart.org))
- National Art Education Association ([https://www.arteducators.org](https://www.arteducators.org))
- National Council of Art Administrators ([http://www.ncaaarts.org](http://www.ncaaarts.org))
- Pennsylvania Art Education Association ([http://paeablog.org](http://paeablog.org))
- Association for Computing Machinery (ACM) SIGGRAPH ([https://www.siggraph.org](https://www.siggraph.org))

**Contact**

**University Park**

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210 Patterson Building
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814-865-0444
arb184@psu.edu
http://sova.psu.edu