

VISUALIZATION

WHAT IS VISUALIZATION?

Whether through an artist's sketch or computer-generated animation, visual media informs, entertains, and communicates ideas. The interdisciplinary Bachelor of Science in Visualization program engages visual, intuitive, and analytical strategies in design problem-solving for the purpose of visual communication.

The visualization program is structured to develop a student's artistic, scientific, and technical abilities in a studio learning environment. Coursework and instruction provide students a specialized skill set for creating visual experiences in graphic design, interactivity, and animation/visual effects. This broad foundation of knowledge and quality of problem-solving skills provide students with opportunities to pursue careers in the fields of animation, visual effects, game development, graphic design, simulation, and data visualization for architectural, engineering, and medical fields.

A required semester away provides the opportunity to study abroad in one of several foreign studies programs, study at another university, or serve an internship in an industry related to the student's area of interest.

AREAS OF INTEREST

- Interactive media design
- Visual effects
- CG lighting/shading
- Character technical directing
- Game design
- Technical art
- Web development
- CG pipeline development

VISUALIZATION CATALOG 143 (2020-2021) PROGRAM SEMESTER CURRICULUM*

LISTING	CLASS	CREDITS
FIRST YEAR Fall Semester		
ARTS 115	<i>Drawing for Visualization</i>	3
ENGL 104	<i>Composition and Rhetoric</i>	3
PHYS 201	<i>College Physics</i>	4
VIST 105	<i>Principles of Design 1</i>	3
VIST 131	<i>First Year Seminar</i>	1
VIST 284	<i>Visualization Techniques</i>	1
SEMESTER CREDIT HOURS 15		
FIRST YEAR Spring Semester		
ARTS 149	<i>Art History Survey 1</i>	3
MATH 151	<i>Engineering Mathematics 1</i>	4
VIST 106	<i>Principles of Design 2</i>	3
VIST 170	<i>Introduction to Visualization Computing Elements</i>	1
VIST 284	<i>Visualization Techniques</i>	1
POLS 206	<i>Government/Political Science</i>	3
SEMESTER CREDIT HOURS 15		
SECOND YEAR Fall Semester		
ARTS 212	<i>Life Drawing</i>	3
MATH 152	<i>Engineering Mathematics 2</i>	4
VIST 205	<i>Principles of Design 3</i>	3
VIST 270	<i>Computing for Visualization 1</i>	4
Visualization Directed Elective ¹		3

* Subject to change

¹ Select from any 300 or 400 level ARTS or VIST courses

² Select from ARTS 305, ARTS 308, ARTS 311, ARTS 312, ARTS 315, ARTS 325, ARTS 328, ARTS 353, VIST 310, VIST 465

³ Semester away: may be satisfied by study abroad, at another university, internship, or special arrangement by advisor or instructor. Electives may be taken during summer, online, distance education, at another university or college, or at study abroad university.

⁴ Select from any 300-499 course not used elsewhere. If you do not participate in study abroad, 3 hours will come from ICD.

⁵ Select from ARTS 303, ARTS 304, ARTS 403, VIST 357, VIST 370, VIST 372, VIST 374, VIST 470, VIST 472, VIST 476/CSCE 447, VIST 477/CSCE 446, VIST 486, VIST 487/CSCE 443.

A grade of C or better must be made in all College of Architecture courses (ARCH, ARTS, CARC, COSC, ENDS, LAND, LDEV, VIST, URPN

LISTING	CLASS	CREDITS
SECOND YEAR Spring Semester		
ARTS 150	<i>Art History Survey 2</i>	3
VIST 206	<i>Visual Studies Studio 1</i>	3
VIST 235	<i>Theory and Practice in Visualization</i>	2
VIST 271	<i>Computing Visualization 2</i>	4
VIST 284	<i>Visualization Techniques</i>	1
Traditional Arts ²		3
SEMESTER CREDIT HOURS 16		
THIRD YEAR Fall Semester		
ARTS 349	<i>The History of Modern Art</i>	3
VIST 305	<i>Visual Studies Studio 2</i>	3
VIST 339	<i>Research Techniques in Visualization</i>	3
VIST 375	<i>Foundations in Visualization</i>	3
Life and Physical Sciences		4
SEMESTER CREDIT HOURS 16		
THIRD YEAR Spring Semester		
CARC 301 or VIST 494	<i>Field Studies in Innovation³ or Internship</i>	6
Language, Philosophy, and Culture ³		3
Free Elective ^{3,4}		3
SEMESTER CREDIT HOURS 12		
FOURTH YEAR Fall Semester		
HIST 105	<i>History of the United States</i>	3
VIST 405	<i>Visual Studies Studio 3</i>	3
VIST 432 or VIST 441	<i>Applied Perception or Scientific and Technological Developments in Visual Arts</i>	3
VIST439	<i>Capstone Proposal Development</i>	1
Digital Arts ⁵		3
Life and Physical Sciences		1
SEMESTER CREDIT HOURS 14		
FOURTH YEAR Spring Semester		
HIST 106	<i>History of the United States</i>	3
VIST 409	<i>Capstone Studio</i>	3
POLS 207	<i>State & Local Government</i>	3
Communication		3
Social and Behavioral Sciences		3
SEMESTER CREDIT HOURS 15		
TOTAL SEMESTER CREDIT HOURS 120		

and VIZA). Students must also make a grade of C or better in any course used as an equivalent substitution for College of Architecture courses that satisfy degree requirements.

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