Technologies of Visualization and Fabrication – Distributional Electives

Description
Architectural design processes and techniques have been dramatically reorganized in response to advances in digital technologies over the past few decades, which have changed everything in the design practice, from data visualization, to project presentation, to building component fabrication and project delivery. The GSD has remained at the forefront of the critical thinking and use of these technologies through their study in core courses, studios, and electives. The distributional elective requirement asks students to investigate these technologies in greater depth by taking one or more selected electives in the 2000 or 6000 curriculum areas. These courses expose students to an ever expanding repertoire of computational media and techniques in the areas of both design visualization and conceptualization, and object fabrication.

Archive of Past Approved Courses
Note: For a course to count towards a requirement, it must be taken in the year that it was listed as valid.

Spring 2021
2225 Digital Media: Design Systems         Sawako Kaijima
2227 Digital Media: Writing Form           George Legendre
2229 Digital Media: Not Magic              Michelle Chang
6365 Enactive Design: Creative Applications through Concurrent Human-Machine Interaction   Jose Garcia del Castillo Lopez
6368 Pre- and Post-                       Hyojin Kwon
6478 Informal Robotics/New Paradigms for Design & Construction  Chuck Hoberman

Fall 2020
2223 Digital Media: Telepresence, Empathy, and Spatial Immersion  Allen Sayegh
2228 Digital Media: Artifacts               Hyojin Kwon, Zachary Seibold
2314 Responsive Environments: Episodes in Experiential Futures  Allen Sayegh
2481 Public Projection: Projection as a Tool for Expression and Communication in Public Space   Krzysztof Wodiczko
6317 Materials Systems: Digital Design and Fabrication        Nathan King, Zachary Seibold
6338 Introduction to Computational Design          Jose Garcia del Castillo Lopez
6359 Interface Design: Integrating Material Perceptions      Sawako Kaijima
6476 Transformable Design Methods                    Chuck Hoberman

Spring 2020
2223 Digital Media: Ambiance                  Allen Sayegh
2227 Digital Media: Writing Form              George Legendre
2314 Responsive Environments: Episodes in Experiential Futures  Allen Sayegh
2349 MAKE/BELIEVE                             Dan Borelli
6365 Enactive Design: Creative Applications through Concurrent Human-Machine Interaction   Jose Garcia del Castillo Lopez, Zachary Seibold
6368 Pre- and Post-                       Hyojin Kwon
6478 Informal Robotics/New Paradigms for Design & Construction  Chuck Hoberman

Fall 2019
2228 Digital Media: Manipulations             Hyojin Kwon, Zachary Seibold
2229 Digital Media: Composition              Michelle Chang
2481 Public Projection: Projection as a Tool for Expression and Communication in Public Space   Krzysztof Wodiczko
Communication in Public Space
6317 Material Systems: Digital Design and Fabrication Nathan King
6338 Introduction to Computational Design Jose Garcia del Castillo Lopez
6476 Transformable Design Methods Chuck Hoberman

Spring 2019
2223 Digital Media: Ambiance Allen Sayegh
2227 Digital Media: Writing Form George Legendre
2314 Responsive Environments: Episodes in Experiential Futures Sayegh / Andreani
2352 Sections of Every Thing Jungyoon Kim
6359 Interface Design: Integrating Material Perceptions Sawako Kajima
6432 Computational Design 2: Time/Design as Signal Panagiotis Michalatos
6459 Mechatronic Optics Andrew Witt
6478 Informal Robotics/New Paradigms for Design & Construction Chuck Hoberman

Fall 2018
2225 Digital Media: Design Systems Sawako Kajima
2226 Digital Media: Image Zeina Koreitem
2349 MAKE/BELIEVE Dan Borelli
2350 Graphic / Volume Conflations Viola Ago
2481 Public Projection: Projection as a Tool for Expression and Communication in Public Space Krzysztof Wodiczko
6317 Material Systems: Digital Design and Fabrication Nathan King
6338 Introduction to Computational Design Sawako Kajima
6360 Digital Fabrication and Robotics Stylianos Dritsas
6465 Deployable Surfaces: Dynamic Performance Through Multi-Material Architectures Chuck Hoberman

Spring 2018
2224 Digital Media II Andrew Witt
2346 Near Drawing Volkan Alkanoglu
2453 Graphic Narratives Michael Rock
2483 Projection-Animation Krzysztof Wodiczko
6358 Computational Geometry Wu / Legendre
6425 Material Distributions: Digital Immersive Workflows for ... Panagiotis Michalatos

Fall 2017
2456 Experiments in Computer Graphics Zeina Koreitem
2481 Public Projection: Projection as a Tool for Expression and Communication ... Krzysztof Wodiczko
6317 Material Systems: Digital Design and Fabrication Martin Bechthold
6349 Mapping II: Geosimulation Robert Pietrusko
6338 Introduction to Computational Design Michalatos / Kajima
6463 Hybrid Formations Volkan Alkanoglu
6465 Deployable Surfaces: Dynamic Performance Through Multi-Material... Hoberman / Grinham