UC SAN DIEGO DEPARTMENT OF VISUAL ARTS
INTERDISCIPLINARY COMPUTING AND THE ARTS MAJOR
For Students Declared Fall 2016 to Spring 2021

Major Code: VA29

The Interdisciplinary Computing and the Arts major in the Music and Visual Arts Departments draws upon and aims to bring together ideas and paradigms from computer science, art, and cultural theory. It takes for granted that the computer has become a metamedium and that artists working with computers are expected to combine different media forms in their works. All of this makes the program unique among currently existing computer art or design programs which, on the one hand, usually focus on the use of computers for a particular media (for instance, specializing in computer animation, or computer music, or computer design for print) and, on the other hand, do not enter into a serious dialogue with current research in computer science, only teaching the students "off-the-shelf" software. The goals of the program are to prepare the next generation of artists who will be functioning in a computer-mediated culture; to give students necessary technical, theoretical and historical backgrounds so they can contribute to the development of new aesthetics for computer media; to prepare students to mediate between the worlds of computer science and technology, the arts, and the culture at large by being equally proficient with computing and cultural concepts; and to give students sufficient understanding of the trajectories of development in computing so they can anticipate and work with the emerging trends, rather than being locked in particular software currently available on the market.

LOWER DIVISION	8-11 courses / 34-46 units
UPPER DIVISION	12 courses / 48 units
TOTAL COURSES REQUIRED	**20-23 courses / 82-94 units**

ALL COURSES TAKEN FOR MAJOR REQUIREMENTS MUST BE TAKEN FOR A **LETTER GRADE**, AND ONLY GRADES OF **C- OR BETTER** WILL BE ACCEPTED. REFER TO COURSE DESCRIPTIONS FOR ENFORCED PREREQUISITES.

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◆Indicates Production Course, enrollment in production courses is limited to two per quarter

FOUNDATIONAL LEVEL (8-10 Courses/34-42 units)

MUS 4	Introduction to Western Music
VIS 10	Computing in the Arts Lecture Series
VIS 22	Formations of Modern Art
VIS 41	Design Communication
VIS 70N	Introduction to Media

Choose one Computer Science sequence:

CSE 11	Intro to Computer Science and Object-Oriented Programming: JAVA

OR

CSE 8A+8B	Intro to Computer Science: JAVA

Choose one Mathematics sequence:

MATH 15A/CSE 20	Discrete Mathematics

OR

MATH 20A+20B	Calculus for Science and Engineering

OR

MATH 10A+10B+10C	Calculus

Choose one Art Making course:

VIS 1	Introduction to Art-Making: 2D
VIS 2	Introduction to Art-Making: Motion
VIS 3	Introduction to Art-Making: 3D
VIS 60	Introduction to Digital Photography
VIS 80	Introduction to the Studio Major

INTERMEDIATE LEVEL (6 Courses/24 units)

VIS 142◆	Practices in Computing Arts
VIS 145A◆	Digital Media I: Time, Movement, Sound
MUS 171◆	Computer Music I

Choose two Art Making courses:

VIS 141A◆	Computer Programming for the Arts I
VIS 147A◆	Electronic Technologies for Art I
VIS 143◆	Virtual Environments
MUS 170◆	Musical Acoustics
MUS 172◆	Computer Music II
MUS 173◆	Electronic Music Production and Composition
MUS 174 A-B-C◆	Recording/MIDI Studio Techniques

Choose one Interdisciplinary course:

VIS 100◆	Introduction to Public Culture
VIS 102◆	Cross-Border Urbanization
VIS 105A◆	Drawing: Representing the Subject
VIS 105D◆	Aesthetics of Chinese Calligraphy
VIS 106A◆	Painting: Image Making
VIS 107A◆	Sculpture: Making the Object
VIS 164◆	Photographic Strategies
VIS 165◆	Camera Techniques: Analog Futures

HISTORY AND THEORY (2 Courses/8 units)

VIS 159	History of Art and Technology

Choose one from:
Any Upper Division Art History Course VIS 120-129
Any Upper Division Film Studies Course VIS 150-158, 194S

<u>ADVANCED LEVEL</u> (4 Courses/16 units)

Choose one Art Making course:

VIS 141B♦   Computer Programming for the Arts II
VIS 145B♦   Time and Process Based Digital Media II
VIS 147B♦   Electronic Technologies for Art II

Required two courses:

VIS/MUS 160A♦   Senior Project in Computer Arts I
VIS/MUS 160B♦   Senior Project in Computer Arts I

Choose one Interdisciplinary course:

VIS 108♦   Advanced Projects in Art
VIS 109♦   Advanced Projects in Media
VIS 110A-J   Advanced- Various Topics
VIS 130♦   Special Projects in Media
VIS 131♦   Special Projects in Media
VIS 132♦   Installation Productions and Studio
VIS 141A♦   Computer Programming for the Arts I
VIS 143♦   Virtual Environments
VIS 147A♦   Electronic Technologies for Art I
VIS 148♦   Visualizing Art Practice
VIS 149♦   Seminar in Contemporary Computer Topics
VIS 167♦   Social Engagement & Photography
VIS 168♦   Pictorialism and Constructed Reality
VIS 198♦   Directed Group Study
VIS 199♦   Special Studies in Visual Arts
AIP 197♦   Academic Internship Program

NOTE: VIS 141A, 147A, and VIS 143 may be taken for the Intermediate or Advanced level but not both.