Minors Offered by the College of Fine Arts

The College of Fine Arts offers minors in Architecture, Art, Design, Drama, and Music to students from other colleges at Carnegie Mellon University. These minors allow students at Carnegie Mellon to take courses and develop a direction for electives in any of the five schools in CFA. Students in the College of Fine Arts may also earn minors outside of their major within other schools in the College. They may also study any of the minors offered by the other colleges to the University at large, thus taking advantage of the broad educational opportunities available at Carnegie Mellon University.

Minors Offered by the College of Fine Arts:

- Architectural Design Fabrication (available only to B. Arch candidates)
- Architectural Representation and Visualization (available also to B. Arch candidates)
- Architectural Technology
- Architecture
- Architecture History (available also to B. Arch candidates)
- Art
- Building Science (available only to B. Arch candidates)
- Collaborative Piano (available only to Piano majors in the School of Music)
- Conducting (available only to students in the School of Music)
- Design
- Drama
- History of the Arts
- Media Design (IDeATe)
- Music
- Music Education (available only to students in the School of Music)
- Music Technology
- Music Theory
- Musicology
- Performance
- Photography
- Sonic Arts (IDeATe)
- Sound Design (IDeATe)

Guidelines for students are: 1) except where so designated, CFA students are not eligible to earn a minor in their own school; students from outside CFA may earn a minor in any school in CFA; 2) faculty advisors in the student's home school (in consultation with the academic officer of the other unit involved) will advise students as to the structuring of the courses in each minor; 3) a minor is not to be considered an overload; rather, through the assistance of faculty advisors it should be integrated into a student's overall units required for graduation; 4) the advisors will also monitor the student's development in these minors and keep records in their files which indicate the fulfillment of the course requirements in the minors, as well as in the majors in the student's own school. Courses listed as possible for the minors may be available, but not all courses are offered every semester. Students should consult with their advisors.

Students interested in earning a minor in any of the CFA schools should contact: Architecture: Heather Workinger; Art: Keni Jefferson; Design: Melissa Cicozi; Drama: Amy Nichols; Music: Sharon Johnston.

Architecture Minors

This sequence is for candidates who intend to develop intellectual links to the architectural profession. The scope of courses offered includes a full spectrum of professional issues in architecture.

### Prerequisite Courses

- 79-104: Global Histories
- 62-110: Passport to the Arts

### Required Courses

- 48-100: Architecture Design Studio: Foundation I
- 48-095: Spatial Concepts for Architects I
- 48-240: Historical Survey of World Architecture and Urbanism I

### Elective Courses

- 48-120: Digital Media I
- 48-121: Drawing I
- 48-125: Digital Media II
- 48-126: Drawing II
- 48-126: Drawing II
- 48-175: Descriptive Geometry
- 48-215: Materials & Assembly
- 48-351: Human Factors in Architecture
- 48-324: Structures/Statics
- 48-452: Real Estate Design and Development
- 48-453: Urban Design Methods
- 48-383: Ethics and Decision Making in Architecture
- 48-xxx: Architecture History (Pre-Approval of coursework required)

**Minimum Units:** 54

*Students should consult the Architecture advisor regarding elective choices.*

### Minor in Architecture History

(available also to B. Arch Candidates)

This sequence is intended for candidates interested in the history of architecture in its many manifestations, including high style and vernacular buildings, western and non-western traditions, built and theoretical works, and rural to urban contexts. Non-architecture majors are required to take 54 units of architectural history. Architecture majors wishing to minor in Architectural History must fulfill the three core required courses in architectural history, plus four additional architectural history electives, for a total of 63 units. Students wishing to pursue the minor should meet with the Architecture advisor to determine if a course is eligible.

### Required Courses

- 48-240: Historical Survey of World Architecture and Urbanism I
- 48-241: Modern Architecture

### Elective Courses

- 36 units/45 units

*Students wishing to pursue the minor should meet with the Architecture advisor to determine course eligibility for electives.*

**Minimum Units:** 54 (non architecture majors)

**Minimum Units:** 63 (architecture majors)

### Minor in Architectural Representation and Visualization

This sequence is for candidates who intend to develop particular skills in architectural representation. The Minor in Architectural Representation and Media is intended for those students that want to deepen their knowledge in architectural representation and media and for those who are interested in gaining advanced placement (AMP) in the M. S. programs offered by the School in the areas of Computational Design, Tangible Interaction Design and/or Emerging Media. It is earned by completing the four required media courses and then an additional three elective courses in these areas. Architecture majors wishing to pursue a Minor in Architectural Representation and Visualization must complete the required 33 units and at least an additional 30 units to fulfill the minor for a total of 63 units.

### Required Courses

- 48-120: Digital Media I
- 48-125: Digital Media II
- 48-126: Drawing I
- 48-126: Drawing II
Elective Courses 30-39 units

48-568 Advanced CAD, BIM, and 3D Visualization 9
48-576 Mapping Urbanism 9
48-724 Scripting and Parametric Design 6
48-3xx Architectural Drawing Elective (Pre-Approval of coursework required) 9
48-xxx Architectural Representation/Visualization Elective: (Pre-Approval of coursework required) 9

Minimum Units: 54 (non-architecture majors)
Minimum Units: 63 (architecture majors)

Minor in Architectural Technology
This sequence is for candidates who intend to develop intellectual links to the technical aspects of the profession. It is not available to B. Arch Candidates.

Prerequisite Courses 22 units
33-106 Physics I for Engineering Students 12
21-120 Differential and Integral Calculus 10

Elective Courses 32 units
48-116 Building Physics 9
48-215 Materials & Assembly 9
48-324 Structures/Statics 9
48-315 Environment I: Climate & Energy in Architecture 9
48-432 Environment II: Design Integration of Active Building Systems 9
48-752 Zero Energy Housing 9

Minimum Units: 54

Minor in Building Science
(Available only to B. Arch Candidates)
The Minor in Building Science is intended for those students who want to deepen their knowledge in the building sciences and for those who are interested in gaining advanced placement (AMP) in the M.S. programs offered by the School in the areas of Building Performance & Diagnostics and Sustainable Design. It is earned by completing the two required building technology and three environmental science courses and then an additional three elective courses in the building sciences.

Required Course 12 units
48-722 Building Performance Modeling 12

Elective Courses 45 units
48-795 LEED, Green Design and Building Rating in Global Context 6
48-721 Building Controls and Diagnostics 12
48-723 Performance of Advanced Building Systems Var.
48-729 Productivity, Health and the Quality of Buildings 9-12
48-749 Special Topics in Computational Design: Experimental Archaeology of CAD 6
48-752 Zero Energy Housing 9

Minimum Units: 54

Minor in Architectural Design Fabrication
(Available only to B. Arch Candidates)
The Minor in Architectural Design Fabrication is intended for those who wish to develop focused, disciplinary expertise in both analog and digital material methods for shaping the built environment and become involved in a community of practice dedicated to a rigorous pursuit of making as a mode of architectural research and cultural expression. It is also for students interested in gaining advanced placement in the SoA’s Master of Advanced Architectural Design (MAAD) program.

Required Courses 33 units
48-545 Design Fabrication 9
48-555 Introduction to Architectural Robotics 9
48-xxx Advanced Synthesis Options Studio with Digital Fabrication Emphasis 18

Elective Courses 30 units
48-470 The Depth of Surface 9
48-473 Hand and Machine Joinery, New Directions 9
48-531 Fabricating Customization: Prototype 9
48-564 Furniture Design & Construction 9
48-xxx Advanced Design Fabrication 3-9
xx-xxx Pre-approved Design Fabrication Related Course

Minimum Units: 63
Art Minor

Concept Studio (choose one) 10 units
- 60-101 Transdisciplinary Research Studio I: Risk, Agency, Failure 10
- 60-201 Transdisciplinary Research Studio II: Publics 10
- 60-202 Transdisciplinary Research Studio III: Futures 10

Media Studios (choose two) 20 units
- 60-110 Electronic Media Studio: Introduction to the Moving Image 10
- 60-210 Electronic Media Studio: Introduction to Interactivity 10
- 60-131 3D Media Studio I 5
- 60-132 3D Media Studio II 5
- 60-134 3D Media Studio II 5
- 60-131 - 60-134 count as half a course each.
- 60-150 2D Media Studio: Drawing 10
- 60-160 2D Media Studio: Imaging 10
- 60-250 2D Media Studio: Painting 10
- 60-251 2D Media Studio: Print Media 10

Advanced Media (choose two) 20 units
- 60-4xx Advanced ETB: Electives 10
- 60-4xx Advanced SIS: Electives 10
- 60-4xx Advanced DP3: Electives 10
- 60-4xx Advanced CP: Electives 10

Critical Studies (choose one) 9 units
- 60-1xx Art History Elective 9
- 60-2xx Art History Elective 9
- 60-3xx Art History Elective 9

Minimum units: 59

Media Design Minor – IDeATe

The minor in Media Design is offered by the School of Art as part of the Integrative Design, Arts and Technology (IDeATe) network. IDeATe offers students the opportunity to become immersed in a collaborative community of faculty and peers who share expertise, experience, and passions at the intersection of arts and technology. Students will engage in active learning by ‘doing’ in shared labs and maker spaces. The program addresses current and emerging real-world challenges that require disciplinary expertise coupled with multidisciplinary perspectives and collaborative integrative approaches.

The IDeATe undergraduate curriculum consists of eight areas, all of which can also be taken as minors. The themes of these areas integrate knowledge in technology and arts: Game Design, Animation & Special Effects, Media Design, Design for Learning, Sonic Arts, Innovation and Entrepreneurship, Intelligent Environments, and Physical Computing. For more information about the IDeATe network, please see Undergraduate Options (http://coursecatalog.web.cmu.edu/servicesandoptions/undergraduateoptions/#ideate).

The Media Design minor serves students who are interested in digital mediation of experiences. It explores the interconnected development of technology and content in new media systems and the meaning that arises from the resulting forms. Students learn to design mediated experiences across different platforms, from mobile to large-scale installations. They study the structure and function of different components of mediated experiences. They learn how to synthesize those components and how to connect modular structures for the creation of transmedia experiences.

Curriculum

One Computing Course - Minimum of 9 Units
- 15-104 Introduction to Computing for Creative Practice 10
- 15-110 Principles of Computing 10

One IDeATe Portal Course - Minimum of 9 Units
- 62-150 IDeATe Portal: Introduction to Media Synthesis and Analysis 10
- 16-223 IDeATe Portal: Creative Kinetic Systems 10
- 18-090 Twisted Signals: Multimedia Processing for the Arts 10
- 60-218 IDeATe Portal: Real-Time Animation 10
- 60-223 IDeATe Portal: Introduction to Physical Computing 10
- 99-361 IDeATe Portal 9

IDeATe Media Design Courses - Minimum of 27 Units

- 05/18-540 Rapid Prototyping of Computer Systems 12
- 15-294 Special Topic: Rapid Prototyping Technologies 5
- 15-394 Intermediate Rapid Prototyping 5
- 16/54-375 IDeATe: Robotics for Creative Practice 10
- 24-672 Special Topics in DIY Design and Fabrication 12
- 48/53-558 Reality Computing 12
- 51-236 Information Design 9
- 51-400 Transition Design 9
- 51-421 Design Center: Data Visualization 9
- 53-312 Guest Experience in Theme Park Design 9
- 53-376 360 Story and Sound 12
- 53-642 Themed Entertainment Design Studio 12
- 54-399 Decoding Media 9
- 60-110 Electronic Media Studio: Introduction to the Moving Image 10
- 62-362 IDeATe: Electronic Logics & Creative Practice 10
- 62-478 IDeATe: digiTOL 6
- 67-240 Mobile Web Design & Development 9
- 76-374 Mediated Narrative, English-IDeATe 9
- 82-285 Podcasting: Language and Culture Through Storytelling 9

Double-Counting

Students may double-count up to two of their Media Design minor courses toward requirements for other majors or minors.

Design Minor

Minoring in Design is a great way for students to diversify their studies and incorporate design skills and thinking into their overall academic experiences. Students who are already School of Design majors are not eligible to earn a Design minor. The 54 required units must be unique to the Design minor. No courses may be double counted.

Requirements and Electives

For a design minor, students must complete 54 units: 36 units of required courses, plus 18 units of design electives.

Required Design Courses

Both of these:
- 51-262 Design Center: CD Fundamentals: Design for Interactions for Communications (formerly CDF) 9
- 51-264 Design Center: Product Design Fundamentals: Design for Interactions for Products (formerly IDF) 9

Two of these:
- 51-171 Placing 10
Music Minors

This sequence is for candidates who are majors from any discipline in the university other than music who have some background in music and would like to know more about music.

Admission Requirements:

1. The student must apply to enter the program in the office of the Director of Student Services (CFA 108).

Prerequisite Course

Beginning Piano for Minors is required of students who do not pass a beginning piano proficiency test.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-294</td>
<td>Beginning Piano Test</td>
<td>0</td>
</tr>
<tr>
<td>57-329</td>
<td>Beginning Piano for Minors</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Music Courses

Basic Harmony I and/or Basic Solfege I are required of students who do not qualify for entrance into Harmony I and/or Solfege I, based on their scores on the theory and solfege placement tests. These classes fulfill the harmony and solfege requirements.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>57-152</td>
<td>Harmony I</td>
<td>9</td>
</tr>
<tr>
<td>57-161</td>
<td>Eurhythmics I</td>
<td>3</td>
</tr>
<tr>
<td>57-181</td>
<td>Solfege I</td>
<td>3</td>
</tr>
<tr>
<td>57-173</td>
<td>Survey of Western Music History</td>
<td>9</td>
</tr>
<tr>
<td>57-188</td>
<td>Repertoire and Listening for Musicians</td>
<td>1</td>
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</tbody>
</table>

Required Studio Courses (studio fee is charged)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-1xx</td>
<td>Elective Studio</td>
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<tr>
<td>57-3xx</td>
<td>Elective Studio</td>
<td>6</td>
</tr>
<tr>
<td>57-1xx</td>
<td>Elective Studio</td>
<td>6</td>
</tr>
</tbody>
</table>

Elective Courses

Elective courses are to be chosen from those courses listed for the School of Music in the current course catalog. Performance electives are encouraged. (An audition is required for all School of Music performance electives.)

Minimum units required: 67

Minor in Music Technology

This sequence is for candidates who are majors from any discipline in the university who have some background in music and would like to know more about music technology.

Note: Students in the School of Music have slightly different requirements for the Minor in Music Technology. See School of Music (http://coursecatalog.web.cmu.edu/collegeoffinearts/schoolofmusic/ #minorinmusicitechnologyforstudentsinthescuolofmusic).

Admission Requirements

The student must apply to enter the program in the office of the Director of Student Services (CFA 108).

Prerequisite Course

Beginning Piano for Minors is required of students who do not pass a beginning piano proficiency test.

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<td>57-329</td>
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Required Music Courses

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<td>Harmony I</td>
<td>9</td>
</tr>
<tr>
<td>57-161</td>
<td>Eurhythmics I</td>
<td>3</td>
</tr>
</tbody>
</table>
Minors Offered by the College of Fine Arts

57-173 Survey of Western Music History 9
57-181 Solfege I 3
57-188 Repertoire and Listening for Musicians 1

Sound Recording Courses 21 units
57-337 Sound Recording 6
57-338 Sound Editing and Mastering 6
57-438 Multitrack Recording 9

Music Technology/Sound Courses (choose 3) 21 units
Choose three courses. One of the three courses must be either Introduction to Computer Music or Electronic and Computer Music. (Note that 15-112 is a prerequisite for 15-322; 57-101 or 57-171 is a prerequisite for 57-347.) Other courses may be taken with the permission of the music technology minor advisor.
15-104 Introduction to Computing for Creative Practice 10
15-322 Introduction to Computer Music 9
15-323 Computer Music Systems and Information Processing 9
18-090 Twisted Signals: Multimedia Processing for the Arts 10
33-114 Physics of Musical Sound 9
54-166 Introduction to Sound Design for Theatre 6
54-275 History of Sound Design 3
54-505 Ear Training 1
54-666 Production Audio 6
57-344 Experimental Sound Synthesis 9
57-347 Electronic and Computer Music 6
57-478 Survey of Historical Recording 6
60-352 NOISE: Toward a Critical Theory of Sound and Hearing 9

Minimum units required: 67

Minor in Music Theory
This sequence is for candidates who are majors from any discipline in the university who have some background in music and would like to know more about music theory.

Note: Students in the School of Music have slightly different requirements for the Minor in Music Theory. See School of Music (http://coursecatalog.web.cmu.edu/collegeoffinearts/schoolofmusic/ #minorinnusictechnologyforstudenstinsestheschoolofmusic).

Admission Requirements
The student must apply to enter the program in the office of the Director of Student Services (CFA 108).

Prerequisite Course 0–3 units
Beginning Piano for Minors is required of students who do not pass a beginning piano proficiency test.
57-294 Beginning Piano Test 0
57-329 Beginning Piano for Minors 3

Required Music Courses 25 units
Basic Harmony I and/or Basic Solfege I are required of students who do not qualify for entrance into Harmony I and/or Solfege I, based on their scores on the theory and solfege placement tests. These classes fulfill the harmony and solfege requirements.
57-152 Harmony I 9
57-161 Eurhythmics I 3
57-173 Survey of Western Music History 9
57-181 Solfege I 3
57-188 Repertoire and Listening for Musicians 1

Required Theory Courses 21 units
57-151 Counterpoint in Theory and Application 6
57-153 Harmony II 9
57-408 Form and Analysis 6

Upper Level Theory Course (choose one) 6 units
See theory courses on the Music Support Courses Two-Year Rotation list. It is available on the Inside Music website: http://music.cfa.cmu.edu/. A graduate course may be taken with the permission of the instructor.

Elective Courses 18 units
Elective courses are to be chosen from those courses listed for the School of Music in the current course catalog.

Minimum units required: 70

Minor in Musicology
This sequence is for candidates who are majors from any discipline in the university who have some background in music and would like to know more about music history.

Admission Requirements
The student must apply to enter the program in the office of the Director of Student Services (CFA 108).

Prerequisite Course 0-3 units
Beginning Piano for Minors is required of students who do not pass a beginning piano proficiency test.
57-294 Beginning Piano Test 0
57-329 Beginning Piano for Minors 3

Required Music Courses 15 units
Basic Harmony I and/or Basic Solfege I are required of students who do not qualify for entrance into Harmony I and/or Solfege I, based on their scores on the theory and solfege placement tests. These classes fulfill the harmony and solfege requirements.
57-152 Harmony I 9
57-161 Eurhythmics I 3
57-181 Solfege I 3

Required Musicology Courses 36 units
57-283 Music History I 9
57-284 Music History II 9
57-285 Music History III 9
57-190 Repertoire and Listening for Musicians I 3
57-289 Repertoire and Listening for Musicians II 3
57-290 Repertoire and Listening for Musicians III 3

Upper Level Musicology Course (choose one) 6 units
See musicology courses on the Music Support Courses Two-Year Rotation list. It is available on the Inside Music website: http://music.cfa.cmu.edu/. A graduate course may be taken with the permission of the instructor.

Elective Courses 18 units
Elective courses are to be chosen from those courses listed for the School of Music in the current course catalog.

Minimum units required: 75

Sonic Arts Minor - IDeATe
The minor in Sonic Arts is offered by the School of Music as part of the Integrative Design, Arts and Technology (IDeATe) network. IDeATe offers students the opportunity to become immersed in a collaborative community of faculty and peers who share expertise, experience, and passions at the intersection of arts and technology. Students will engage in active ‘learning by doing’ in shared labs and maker spaces. The program addresses current and emerging real-world challenges that require disciplinary expertise coupled with multidisciplinary perspectives and collaborative integrative approaches.

The IDeATe undergraduate curriculum consists of eight areas, all of which can also be taken as minors. The themes of these areas integrate knowledge in technology and arts: Game Design, Animation & Special Effects, Media Design, Design for Learning, Sonic Arts, Innovation and Entrepreneurship, Intelligent Environments, and Physical Computing. For more information about the IDeATe network, please see Undergraduate Options (http://coursescatalog.web.cmu.edu/servicesandoptions/undergraduatedepartments#/ideate).

In the Sonic Arts minor, students create experimental music or explore new, technology-enabled applications and markets for sound design, music creation, and performance.

Curriculum
One Computing Course - Minimum of 9 Units

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-104</td>
<td>Introduction to Computing for Creative Practice</td>
<td>10</td>
</tr>
<tr>
<td>15-110</td>
<td>Principles of Computing</td>
<td>10</td>
</tr>
<tr>
<td>15-112</td>
<td>Fundamentals of Programming and Computer Science</td>
<td>12</td>
</tr>
<tr>
<td>60-210</td>
<td>Electronic Media Studio: Introduction to Interactivity</td>
<td>10</td>
</tr>
<tr>
<td>60-212</td>
<td>Electronic Media Studio: Interactivity and Computation for Creative Practice</td>
<td>12</td>
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</table>

One IDeATe Portal Course - Minimum of 9 Units

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-090</td>
<td>Twisted Signals: Multimedia Processing for the Arts</td>
<td>10</td>
</tr>
<tr>
<td>16-223</td>
<td>IDeATe Portal: Creative Kinetic Systems</td>
<td>10</td>
</tr>
<tr>
<td>60-223</td>
<td>IDeATe Portal: Introduction to Physical Computing</td>
<td>10</td>
</tr>
<tr>
<td>62-150</td>
<td>IDeATe Portal: Introduction to Media Synthesis and Analysis</td>
<td>10</td>
</tr>
<tr>
<td>99-361</td>
<td>IDeATe Portal</td>
<td>9</td>
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</tbody>
</table>

IDeATe Sonic Arts Courses - Minimum of 27 Units

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-322</td>
<td>Introduction to Computer Music</td>
<td>9</td>
</tr>
<tr>
<td>15-323</td>
<td>Computer Music Systems and Information Processing</td>
<td>9</td>
</tr>
<tr>
<td>18-493</td>
<td>Electroacoustics</td>
<td>12</td>
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<tr>
<td>33-114</td>
<td>Physics of Musical Sound</td>
<td>9</td>
</tr>
<tr>
<td>53-376</td>
<td>360 Story and Sound</td>
<td>12</td>
</tr>
<tr>
<td>54-166</td>
<td>Introduction to Sound Design for Theatre</td>
<td>6</td>
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<tr>
<td>54-267</td>
<td>Conceptual Sound Design</td>
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<tr>
<td>54-509</td>
<td>Theatrical Sound System Design</td>
<td>2</td>
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<tr>
<td>57-337</td>
<td>Sound Recording</td>
<td>6</td>
</tr>
<tr>
<td>57-344</td>
<td>Experimental Sound Synthesis</td>
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<tr>
<td>57-347</td>
<td>Electronic and Computer Music</td>
<td>6</td>
</tr>
<tr>
<td>57-421</td>
<td>Exploded Ensemble</td>
<td>6</td>
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<tr>
<td>57-425</td>
<td>Expanded Music Performance</td>
<td>9</td>
</tr>
</tbody>
</table>

Double-Counting
Students may double-count up to two of their Sonic Arts minor courses toward requirements for other majors or minors.

CFA Dean's Office Minors

Minor in the History of the Arts
This minor of six or more courses as designated below, offers students flexibility to engage in a broad survey in the arts or can be tailored to reflect a more specific area of interest. For College of Fine Arts students, all courses meeting the requirements of the Minor in the History of the Arts must be taken outside of their major School, with the exception of the School of Architecture. Interested students should contact Patti Pavlus in the College of Fine Arts, Room 100.

Introductory Level Courses 27 units

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>48-240</td>
<td>Historical Survey of World Architecture and Urbanism I</td>
<td>9</td>
</tr>
<tr>
<td>48-241</td>
<td>Modern Architecture</td>
<td>9</td>
</tr>
<tr>
<td>54-239</td>
<td>History of Architecture and Decor 1: Ancients to Gothic</td>
<td>Var.</td>
</tr>
<tr>
<td>54-245</td>
<td>History of Clothing 1 (instructor permission only)</td>
<td>Var.</td>
</tr>
<tr>
<td>54-269</td>
<td>History of Clothing 2 (instructor permission only)</td>
<td>Var.</td>
</tr>
<tr>
<td>57-173</td>
<td>Survey of Western Music History (coreq: 57-188)</td>
<td>9</td>
</tr>
<tr>
<td>57-188</td>
<td>Repertoire and Listening for Musicians (coreq of 57-173)</td>
<td>1</td>
</tr>
<tr>
<td>60-105</td>
<td>Critical Theory in Art I (instructor permission only)</td>
<td>9</td>
</tr>
</tbody>
</table>
Intermediate/Advanced Level Courses  27 units
(choose at least three, CFA students pick 3 outside of major)*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>48-348</td>
<td>Architectural History of Mexico &amp; Guatemala</td>
<td>9</td>
</tr>
<tr>
<td>48-374</td>
<td>History of Architecture in the Islamic World- A Primer</td>
<td>9</td>
</tr>
<tr>
<td>48-440</td>
<td>American Regions &amp; Regionalism: An Architectural History of Place, Time, and Cul</td>
<td>9</td>
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<tr>
<td>51-376</td>
<td>Semantics &amp; Aesthetics</td>
<td>4.5</td>
</tr>
<tr>
<td>57-209</td>
<td>The Beatles</td>
<td>9</td>
</tr>
<tr>
<td>57-476</td>
<td>How Music Works: An Affective History</td>
<td>6</td>
</tr>
<tr>
<td>57-477</td>
<td>Music of the Spirit</td>
<td>6</td>
</tr>
<tr>
<td>57-478</td>
<td>Survey of Historical Recording</td>
<td>6</td>
</tr>
<tr>
<td>57-480</td>
<td>History of Black American Music</td>
<td>6</td>
</tr>
<tr>
<td>57-485</td>
<td>History of the Symphony</td>
<td>9</td>
</tr>
<tr>
<td>Art Critical Studies Electives: 60-352 to 60-398 (instructor permission only)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>62-360/79-329</td>
<td>Photographers and Photography Since World War II</td>
<td>9</td>
</tr>
<tr>
<td>62-371/79-316</td>
<td>Photography, The First 100 Years, 1839-1939</td>
<td>9</td>
</tr>
<tr>
<td>79-395</td>
<td>The Arts in Pittsburgh</td>
<td>9</td>
</tr>
<tr>
<td>79-396</td>
<td>Music and Society in 19th and 20th Century Europe and the U.S.</td>
<td>9</td>
</tr>
</tbody>
</table>

Minimum units required for minor: 54

*Other courses not on this list may qualify as approved by CFA Dean’s Office (College of Fine Arts, Room 100).

Minor in Photography

The Photography Minor exposes students to the breadth of offerings from traditional photography (i.e. film exposure and silver printing) to digital shooting and output. The student will become familiar with photography’s craft, its history and significant practitioners, and develop their own distinct engagement with the medium.

Students may apply for the Photography Minor after they have taken a beginning photography course. Students will be admitted to the minor based on their aptitude, appropriate level of photography skills, and space availability within the program. Once admitted, students will be assigned a faculty advisor who will help them determine a sequence of courses that best fits their needs and interests.

Application Requirements

The application process for the Photography Minor requires submission of: a completed application form signed by the home department advisor, a personal statement, and a portfolio of photographs. Contact the CFA Photography Administrator, Jamie Gruzska, MM B18, for further information and an application form.

Photography Required Courses (3) minimum 27 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>62/60-141</td>
<td>Black and White Photography I *</td>
<td>10</td>
</tr>
<tr>
<td>62/60-142</td>
<td>Digital Photography I</td>
<td>10</td>
</tr>
<tr>
<td>62/60-241</td>
<td>Black and White Photography II</td>
<td>10</td>
</tr>
</tbody>
</table>

Photography Elective (1)  minimum 9 units

Choose one (1) or more additional photography courses from the list below in consultation with the photo advisor; consult Jamie Gruzska for current offerings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>62-208</td>
<td>Alternative Photography: Contemporary Antiquarian Printmaking</td>
<td>5</td>
</tr>
<tr>
<td>62-214</td>
<td>Photography and the Narrative of Place</td>
<td>5</td>
</tr>
<tr>
<td>62-235</td>
<td>Photographing America</td>
<td>10</td>
</tr>
<tr>
<td>62-245</td>
<td>Portrait Photography</td>
<td>10</td>
</tr>
</tbody>
</table>
Minors Offered by the College of Fine Arts

Photo History Required Course (1)  minimum 9 units
62-371  Photography, The First 100 Years, 1839-1939 * 9
or 62-360  Photographers and Photography Since World War II

History, Theory, or Criticism of the Visual Arts
Elective (1)  minimum 9 units
Choose one (1) additional History, Theory or Criticism of the Arts course in consultation with the photo advisor. A second Photo History course (62-360 or 62-371) can be used for this requirement.

*or course approved by the photography advisor
Minimum units required for minor: 54