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:
- Architecture
- Architectural History (available also to B. Arch candidates)
- Architectural Representation and Visualization (available also to B. Arch candidates)
- Architectural Technology
- Art
- Building Science (available only to B. Arch candidates)
- Communication Design
- Drama
- History of the Arts
- Industrial Design
- Music
- Music Technology
- Music Theory
- Photography

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: Ari Blackford; Music: Sharon Johnston.

Minors under Architecture

Minor in Architecture

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.

9 units Prerequisite Courses
- 79-104 Global Histories or 62-110 Passport to the Arts

18-21 units Required Courses
- 48-100 Architecture Design Studio: Foundation I
- 48-095 Spatial Concepts for Non-Architects I
- 48-240 Historical Survey of World Architecture and Urbanism I

27 units Elective Courses*
- 48-121 Analog Media I
- 48-126 Digital Media I
- 48-120 Digital Media II
- 48-125 Digital Media II
- 48-215 Materials and Assembly
- 48-324 Structures/Statics
- 48-351 Human Factors in Architecture

Minor in Architectural 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.

36 units/45 units Elective Courses
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.

21 units/30 units Elective Courses
- 48-568 Advanced CAD, BIM, and 3D Visualization
- 48-576 Mapping Urbanism
- 48-724 Scripting and Parametric Design
- 48-3xx Architectural Drawing Elective (Pre-Approval of coursework required)
- 48-xxx Architectural Representation/Visualization Elective: (Pre-Approval of coursework required)
- 48-xxx Architectural Representation/Visualization Elective: (Pre-Approval of coursework required)

Minimum Units: 54 (non-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.

22 units

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

32 units

**Elective Courses**
- 48-116 Building Physics 9
- 48-215 Materials and Assembly 9
- 48-324 Structures/Statics 9
- 48-315 Environment I: Climate & Energy 9
- 48-432 Environment II: Advanced Building Systems 9
- 48-433 Integration & Mechanical 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.

12 units

**Required Course**
- 48-722 Building Performance Modeling 12

45 units

**Elective Courses**
- 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 9
- 48-729 Productivity, Health and the Quality of Buildings 9-12
- 48-749 Special Topics in CD: Parametric Modeling with BIM Var.
- 48-752 Zero Energy Housing 9

**Minimum Units:** 54

**Minors under Art**

**Minor in Art**

10 units

**Concept Studio** (choose one)
- 60-101 Concept Studio: The Self and the Human Being 10
- 60-201 Concept Studio: Space and Time 10
- 60-202 Concept Studio: Systems and Processes 10

**Media Studios** (choose two)
- 60-110 Electronic Media Studio: Introduction to the Moving Image 10
- 60-210 Electronic Media Studio: Introduction to Interactivity 10
- 60-130-60-130 3-D Media Studio I 10
- 60-131-60-131 3-D Media Studio II 10
- 60-150 2D Media Studio: Drawing 10
- 60-160 2D Media Studio: Imaging 10
- 60-250 2D Media Studio: Painting 10

**Minimum Units Required: 54**

20 units

**Advanced Media (choose two)**
- 60-4xx Advanced ETB: Electives 10
- 60-4xx Advanced SIS: Electives 10
- 60-4xx Advanced PDP: Electives 10
- 60-4xx Advanced CP: Electives 10

9 units

**Art History/Theory (choose one)**
- 60-1xx Art History Elective 9
- 60-2xx Art History Elective 9
- 60-3xx Art History Elective 9

**Minimum units: 59**

**Minor in the History of Arts**

This minor of six or more courses as designated below, will offer students a grouping of Arts History courses that can provide a broad survey in the arts or a highly specialized field. 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 Patty Doane in the College of Fine Arts, Room 100.

27 units

**Introductory Level Courses:**

(choose at least three, CFA students pick 3 outside of major)
- 48-240 Historical Survey of World Architecture and Urbanism I (pre-requisite for all advanced architecture classes below) 9
- 51-271 Design History I 9
- 54-239 History of Architecture and Decor Var.
- 54-245 History of Clothing Var.
- 54-246 History of Clothing 2 Var.
- 57-173 Survey of Western Music History 9
- 60-205 Modern Visual Culture 1789-1960 9
- 60-206 Contemporary Visual Culture 1960 - Present 9

27 units

**Advanced Courses:**

(choose at least three, CFA students pick 3 outside of major) *
- 48-340 Modern Architecture and Theory 1900-1945 9
- 48-341 Theory & Expression in Architecture 9
- 48-348 Architectural History of Mexico & Guatemala 9
- 48-440 American Regions & Regionalism: An Architectural History of Place, Time, and Culture 9
- 51-272 Cultures 9
- 51-378 History of the Book and Printing 6
- 54-381 Special Topics in Drama: History, Literature and Criticism 6
- 54-382 History of Drama 3
- 57-209 The Beatles 9
- 57-477 Music of the Spirit 6
- 57-478 Survey of Historical Recording 6
- Art History/Theory Special Topics 60-350 to 60-398 (instructor permission only) 9
- 62-300 Photographers and Photography Since World War II 9
- 62-373/79-372 Photography, The First 100 Years 9
- 79-395 The Arts in Pittsburgh 9
- 79-396 Music and Society in 19th and 20th Century Europe and the U.S. 9

**Minimum units required: 54**

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

**Minor in Design**

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.

18 units Required Courses

51-262 Communication Design Fundamentals 9
or 51-264 Industrial Design Fundamentals
51-271 Design History I (fall) 9

36 units Electives Courses

Elective courses are to be chosen from those listed in the current course catalog. This program description is based on the latest information at the time of publication. Interested students should contact the School of Design regarding any changes in the program and the availability of courses.

minimum units required: 54

Applications

Students must submit transcripts, personal statements, and completed applications by the beginning of February, and submit portfolios or design projects by the beginning of March. They must also obtain permission to complete minors from their major advisors. The minor application form includes detailed requirements.

Admission depends mainly on a student’s demonstration of design skills and aptitude. Students are notified of acceptance by the end of March.

If you are interested in applying for the Minor in Design, please contact Design Advisor, Melissa Cicozi <cicozi@cmu.edu>. You can download the Design Project and Application at www.design.cmu.edu, or paper applications are available at the School of Design office, MMCH 110.

Minor in Drama

The Drama minor provides students with a well-rounded opportunity to obtain preliminary professional exposure to the theatre arts. Courses may involve acting, directing, playwriting, design, production technology and management, and dramatic literature courses. Students also become involved with Drama productions by signing up for Production for Non-Majors, which involves evening crew work on various Drama productions.

Admission Requirements

1. Students must apply to enter the program in the office of the Drama Sr. Academic Advisor, PCA 223.
2. The student must successfully pass one Drama course prior to being considered for minor status.

25 units Required Courses

54-163 Production for Non Majors 6
54-164 Production for Non Majors 6
54-175/176 Conservatory Hour 1
54-177 Foundations of Drama I 6
or 54-178 Foundations of Drama II 6
54-281 Foundations of Drama II 6
or 54-282 Foundations of Drama II

Students must meet with the School of Drama Production Manager (PCA 224) for assignments related to Production for Non-Majors.

30 units Elective Courses

The remainder of the minor is fulfilled with Drama courses of the student’s choosing, with approval from the Sr. Academic Advisor in the School of Drama. For certain courses, students may need instructor permission to register.

Elective Courses not requiring instructor permission:

54-187/188 Introduction to Playwriting 9
54-189/190 Advanced Playwriting 9
54-191/192 Acting for Non-Majors 9
54-193/194 Introduction to Screenwriting 9
54-195/196 Advanced Screenwriting 9

Selected Elective Courses requiring instructor permission:

54-109 Dramaturgy I: Approaches to Text 9
54-121 Directing I: Sources 9
54-157 Basic PTM 6
54-169 StudioCraft 13
54-171 Basic Design 6

Additional Drama Courses are available by instructor agreement and may require an audition, interview, or portfolio review. Students should contact the Drama Sr. Academic Advisor to inquire about permission for specific courses in which they are interested.

minimum units required: 55

Minors in Music

Minor in Music

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).

0-3 units Prerequisite Course

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

57-294 Beginning Piano Test 0
57-329 Beginning Piano for Minors 3

25 units 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.

57-152 Harmony I 9
57-161 Eurhythmics I 3
57-181 Solfege I 3
57-173 Survey of Western Music History 9
57-188 Repertoire and Listening for Musicians 1

24 units Required Studio Courses (studio fee is charged)

57-1xx Elective Studio 6
57-1xx Elective Studio 6
57-1xx Elective Studio 6
57-1xx Elective Studio 6

18 units 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 ensembles.)

Minimum units required: 67

Minor in Music Technology

This sequence is for candidates who major 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/ #minorinmusictechnologyforstudentsintheschoolofmusic).

Admission Requirements

The student must apply to enter the program in the office of the Director of Student Services (CFA 108).
0-3 units Prerequisite Course

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

- 57-294 Beginning Piano Test 0
- 57-329 Beginning Piano for Minors 3

25 units 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.

- 57-152 Harmony I 9
- 57-161 Eurythmics I 3
- 57-173 Survey of Western Music History 9
- 57-181 Solfege I 3
- 57-188 Repertoire and Listening for Musicians 1

21 units Sound Recording Courses

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

21 units Music Technology/Sound Courses (choose 3)

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.

- 15-322 Introduction to Computer Music 9
- 15-323 Computer Music Systems and Information Processing 9
- 33-114 Physics of Musical Sound 9
- 54-509 Theatrical Sound System Design 9
- 54-666 Production Audio 6
- 57-347 Electronic and Computer Music 6

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/#minorinmusicstechnologyforstudentsintheschoolofmusic).

Admission Requirements

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

0-3 units Prerequisite Course

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

- 57-294 Beginning Piano Test 0
- 57-329 Beginning Piano for Minors 3

25 units Required Music Courses

- 57-152 Harmony I 9
- 57-161 Eurythmics I 3
- 57-173 Survey of Western Music History 9
- 57-181 Solfege I 3
- 57-188 Repertoire and Listening for Musicians 1

21 units Required Theory Courses

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

6 units Upper Level Theory Course (choose 1)

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/. Click on Music Support Course Two-Year Rotation. A graduate course may be taken with the permission of the instructor.

18 units Elective Courses

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

Minimum units required: 70

Minors under CFA Dean's Office

Minor in Photography

The Photography Minor exposes students to the breadth of photography offering experiences in traditional photography (i.e. film exposure and silver printing) to digital shooting and output. The student who takes the Photography Minor will become familiar with photography’s craft, its history and significant practitioners, and develop his/her own distinct engagement with the medium.

Students may apply for the Photography Minor after they have taken a CFA or Pittsburgh Filmmakers’ beginning photography course. Freshmen should not apply for the minor. Students in four-year undergraduate programs may apply in their sophomore or junior year. Students in five-year undergraduate programs, such as Architecture, may apply in their second, third, or fourth year. Applications are accepted in both the fall and spring semesters. 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 Gruszka, MM B18, for further information and an application form.

minimum 27 units Photography Required Courses (3)

- 62/60-141/51-265 Black and White Photography I * 10
- 62-241 Black and White Photography II 10
- 62-142 Digital Photography I 10

minimum 9 units Photography Elective (1)

Choose one (1) additional photography course from the list below in consultation with the photo advisor, or consult Jamie Gruszka for current offerings. Also, photo courses may be taken at Pittsburgh Filmmakers. Please refer to their course catalog that is available in the CFA Dean’s Office, CFA 100, or online: pgfhfilmmakers.org (http://www.pghfilmmakers.org)

- 62-165 Mutable Landscape: 10
- 62-245 Portrait Photography 10
- 62-265 Alternative Photo Processes 10
- 62-325 View Camera 10
- 62-326 Photographic Narrative 9
- 62-375 Large Format Photography: The Antiquarian Avant-Garde 10

9 units Photo History Required Course (1)

- 62-371 Photography, The First 100 Years ** 9
  or 62-360 Photographers and Photography Since World War II

9 units History, Theory, or Criticism of the Visual Arts Elective (1)

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.

* prerequisite for photo courses other than history, theory, and/or criticism course
** or course approved by the photography advisor
Minimum units required: 54