ARCHITECTURE I (MAR)

College of Architecture, Art and Planning

Program Website (https://aap.cornell.edu/academics/architecture/graduate/march/)

CIP: 04.0902 | **HEGIS:** 0202.00 | **NYSED:** 26485

Program Description

Cornell's professional Master of Architecture (M.Arch.) program is a seven-semester course of study dedicated to preparing individuals from diverse disciplines and backgrounds for careers in architecture. The M.Arch. program is accredited by the National Architectural Accrediting Board (NAAB). In addition, the M.Arch. program is designated as a STEM program in Architectural and Building Sciences/Technology making international M.Arch. graduates eligible to extend their F-1 visas for up to three years in order to work in the United States. This program meets the State and National Architecture Accrediting Board's educational requirements for licensure in all states.

M.Arch. Policies

Students are expected to follow all university, college, and program policies. Failure to comply with any policy or petition decision may result in review by the program committee.

Academic Standing

To be in good academic standing, a student must:

- Successfully complete a minimum of 12 academic credits each semester; and
- Earn a minimum semester grade point average (GPA) of 2.300; and
- Follow the prescribed M.Arch. curriculum and comply with all university, college, and program policies; and
- Earn no letter grade lower than C in architecture studio courses.

Grades

All required courses and required department electives must be taken for a letter grade. Open electives can be taken under the letter or satisfactory/unsatisfactory grading basis. A letter grade of D- or a grade of S or SX is required for the course to be applied toward the open elective requirement.

All architecture studio courses require a minimum grade of C in order for the credit to be applied toward the studio requirement. A minimum grade of C must be achieved for the student to advance in the core design studio sequence (ARCH 5111, ARCH 5112, ARCH 5113, ARCH 5114). M.Arch. students who do not earn an advancing grade in a core design studio (ARCH 5111, ARCH 5112, ARCH 5113, ARCH 5114) will be design-free in the following semester and must re-enroll in the core design studio the next time it is offered.

Architecture studio courses with university passing grades (D- or better), but below C, will be applied toward the free departmental elective requirement.

Students receiving less than a C in any architecture studio must repeat that studio and obtain a grade of C or better.

A student may repeat any given semester of design once (for a total of two semesters). If, at the end of the second attempt, the student does not achieve a grade of C or better, the student is automatically denied permission to register in design, the effect of which will be to drop the student from the M.Arch. program. Note: Repeating a core design studio given the curricular structure will generally not be possible during the following semester.

Studio Culture

The department's Studio Culture Policy (https://aap.cornell.edu/academics/architecture/about/studio-culture-policy/) is available on the architecture department website.

Course Equivalency

M.Arch. students receive class equivalency information when they are admitted into the program. Students will have the opportunity to submit class syllabi and other materials from previous class work during their undergraduate degree for review by a faculty member charged with reviewing that area of study (history, building technology, professional practice, etc.). Faculty members then determine if equivalency is appropriate. If a student is awarded equivalency for a course, the student will be waived from the course requirement, but they will be required to complete the credits through open electives. The equivalency request form is available online at specific times throughout the year.

M.Arch Classes Eligible for Equivalency:

- ARCH 5201 Professional Practice
- ARCH 5402 Architecture, Culture, and Society
- ARCH 5511 Constructed Drawing I
- ARCH 5512 Constructed Drawing II: Digital Representation and Fabrication
- ARCH 5611 Environmental Systems I: Introduction to Sustainable Design
- ARCH 5616 Environmental Systems II: Building Dynamics
- ARCH 5612 Structural Concepts
- ARCH 5613 Structural Systems
- ARCH 5614 Building Technology I: Materials and Methods
- ARCH 5615 Building Technology II: Structural Elements
- ARCH 5801 History of Architecture I
- ARCH 5802 History of Architecture II

Independent Study

Students wishing to pursue an architecture department independent study course must complete an Architecture Independent Study form, which can be found online on the AAP Academic Forms page (https://aap.cornell.edu/resources/student-services/academic-forms/), endorsed by a faculty member in the department, and submit it to the architecture department office in accordance with enrollment deadlines. Independent study courses cannot be substituted for required courses. Independent study courses of 3 or more credits can be applied toward elective requirements.

Thesis Requirement

Thesis Submission

Each student shall have an advisory faculty committee appointed by the department chair with the recommendations of the student and faculty. Advisors from outside the Department of Architecture may be added, at the student's discretion, to serve as non-grading advisors.

Prior to the final thesis review, students must complete a thesis presentation form indicating the specific content of work to be presented.

A draft of this form should be discussed with the student's committee at least one week prior to the final submission.

Presentation content indicated on the form must be validated by a committee representative at a designated time before the final review, after which time the material to be presented at the final review can be neither added to nor altered in any way. Late work will not be considered for review. Forms are collected by the department chair or a representative designated by the chair. Students may be asked to store physical presentation objects (e.g., drawings, models, or photographs of objects impractical to store) as well as files for any digital content in a secure location designated by the department.

The thesis may be excluded from review altogether if the material submitted is substantially incomplete, in which case the project will receive a mandatory grade of F.

Thesis students may receive assistance in the production of their final review material from a maximum of two current non-thesis students in the B.Arch. or M.Arch. programs; no other assistance will be allowed. All work performed by these assistants must be given proper credit at the final review, as well as in the thesis publication.

Thesis Grading

While critical evaluation is the primary focus of a final thesis review, the actual grading of a thesis project shall be the responsibility of the student's thesis committee. Additional examining faculty in attendance at the review will be asked to submit recommendations for grades; these recommendations may be used by the thesis committee in determining the final grade.

Thesis Book

As a part of the thesis requirement, each student must submit a hardbound thesis book including representations of the final project for deposit in the Fine Arts Library. The book shall include a title page that lists the student's full name, the title of the thesis project, the degree (i.e., M.Arch.), and the expected date of graduation (i.e., May, August, or January; plus year). This book must be approved by a member of the thesis committee (or, in the absence of a committee member, by the chair) before the student's final grade is submitted to the registrar. Approval is noted on the title page (signature of faculty member and date of receipt). Larger pages may be folded, and all pages must be numbered.

Expanded Design Thesis

Students may petition to complete an expanded two-semester thesis in semesters 6 and 7. Students need to form a thesis committee (two faculty) that advises during the full year of thesis. Students need to have all non-studio core curriculum requirements completed to be eligible to conduct an expanded design and research thesis.

Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 113
- Length of Program: 7 semesters; Full-time study

Program Requirements

Semester One		**Hours**
Ithaca		
ARCH 5111	Core Design Studio I: Fundamentals	6
ARCH 5301	Theories and Analyses of Architecture I	3
ARCH 5402	Architecture, Culture, and Society	3
ARCH 5511	Constructed Drawing I	3
ARCH 5611	Environmental Systems I: Introduction to Sustainable Design	3
	Hours	**18**
Semester Two		
Ithaca		
ARCH 5112	Core Design Studio II: Relational and Ecological Design	6
ARCH 5512	Constructed Drawing II: Digital Representation and Fabrication	3
ARCH 5612	Structural Concepts	3
ARCH 5614	Building Technology I: Materials and Methods	3
ARCH 5801	History of Architecture I	3
	Hours	**18**
Semester Three		
Ithaca		
ARCH 5113	Core Design Studio III: Engaged Practices	6
ARCH 5302	Theories and Analyses of Architecture II	3
ARCH 5613	Structural Systems	3
ARCH 5615	Building Technology II: Structural Elements	3
ARCH 5802	History of Architecture II	3
	Hours	**18**
Semester Four		
Ithaca		
ARCH 5114	Core Design Studios IV: Integrative Design Practices	6
ARCH 5616	Environmental Systems II: Building Dynamics	3
3 Electives (Building Technology, History, Theory, Visual Representation, or Open) [1]		9
	Hours	**18**
Semester Five		
Ithaca or New York City		
ARCH 5115	Vertical Design Option Studio	6
ARCH 5201	Professional Practice	3
ARCH 8911	Proseminar in Design Research	2
1 Elective (Building Technology, History, Theory, Visual Representation, or Open) [1]		3
	Hours	**14**
Semester Six		
Ithaca or New York City		
ARCH 5116	Vertical Design Option Studio II	6
3 Electives (Building Technology, History, Theory, Visual Representation, or Open) [1]		9
	Hours	**15**
Semester Seven		
Ithaca		
ARCH 8912	Independent Design Thesis	9

1 Elective (Building Technology, History, Theory, Visual Representation, or Open) [1]	3
Hours	**12**
Total Hours	**113**

[1] The following eight electives are required for graduation and can be taken in any order:

- One Building Technology elective
- One Theory elective
- One History elective
- One Visual Representation elective
- Four open elective classes of 3 or more credits each at the 5000-level or higher

M.Arch. Requirement Areas

Departmental Electives

M.Arch. students are required to successfully complete four departmental electives. This requirement can be satisfied with approved departmental elective courses of 3 or more credits at the 5000-level or higher for a letter grade. Advanced placement credit or equivalency credit **cannot** be applied toward any of the departmental elective requirements.

Building Technology Elective

Students are required to complete one building technology elective. This can be satisfied with successful completion of any ARCH course of 3 or more credits offered under the numbers ARCH 6605-ARCH 6609.

History Elective

Students are required to complete one history elective. This can be satisfied with the successful completion of any ARCH course of 3 or more credits offered under the numbers ARCH 5801-ARCH 5819 and/or ARCH 6800-ARCH 6819.

Theory Elective

Students are required to complete one theory elective. This can be satisfied with successful completion of any ARCH course of 3 or more credits offered under the numbers ARCH 6307 or ARCH 6308.

Visual Representation Elective

Students are required to complete one visual representation elective. This can be satisfied with successful completion of any ARCH course of 3 or more credits offered under the numbers ARCH 6508-ARCH 6509.

Open Electives

Students are required to successfully complete four open electives. Open electives must be 3 or more credits at the 5000-level or higher. Open electives can be taken in any academic department at Cornell. Open electives can be completed for a letter or S/U grade. Courses completed with an audit grade cannot be applied toward this requirement. Open electives cannot be satisfied with equivalency credit.

M.Arch Advanced Placement Track (pending NAAB approval)

Students with a prior degree in Architecture who demonstrate excellence in their portfolio may qualify for the Advanced Placement Track.

To be admitted into the Advanced Placement (AP) Track, the following conditions must be satisfied:

- There has to be a space in the program.
- Students must have covered foundational content for semesters 1 and 2 of the standard curriculum, including:
  - ARCH 5111 Core Design Studio I: Fundamentals and ARCH 5112 Core Design Studio II: Relational and Ecological Design
  - ARCH 5511 Constructed Drawing I and ARCH 5512 Constructed Drawing II: Digital Representation and Fabrication,
  - ARCH 5301 Theories and Analyses of Architecture I,
  - ARCH 5611 Environmental Systems I: Introduction to Sustainable Design,
  - ARCH 5612 Structural Concepts,
  - ARCH 5614 Building Technology I: Materials and Methods,
  - ARCH 5801 History of Architecture I, and
  - ARCH 5402 Architecture, Culture, and Society.
- Qualification is reviewed during the admission process by the program director and the admission committee.

The advanced placement track will follow the M.Arch. curriculum but will skip over foundational classes offered in semesters one and two allowing AP students to complete the M.Arch AP track with a minimum of 77 total credits.

University Graduation Requirements Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (https://registrar.cornell.edu/service-resources/college-registrar-directory/) for more information.

Non-academic Requirements

Conduct Matters. Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

Financial Obligations. Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

M.Arch. Learning Outcomes

The following Student Performance Criteria (SPC), based on NAAB (https://aap.cornell.edu/academics/architecture/about/naab/) requirements, define the expectations for graduating M.Arch students:

Realm A

- Critical Thinking and Representation: Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. This ability includes facility with the wider range of media used to think about architecture including writing, investigative skills, speaking, drawing and model making. Students' learning aspirations include:
- Being broadly educated
- Valuing lifelong inquisitiveness
- Communicating graphically in a range of media
- Recognizing the assessment of evidence
- Comprehending people, place, and context
- Recognizing the disparate needs of client, community, and society

Realm B

Integrated Building Practices, Technical Skills, and Knowledge: Architects are called upon to comprehend the technical aspects of design, systems, and materials and be able to apply that comprehension to their services. Additionally, they must appreciate their role in the implementation of design decisions and the impact of such decisions on the environment. Students learning aspirations include:

- Creating building designs with well-integrated systems
- Comprehending constructability
- Incorporating life safety systems
- Integrating accessibility
- Applying principles of sustainable design

Realm C

Leadership and Practice: Architects need to manage, advocate, and act legally, ethically, and critically for the good of the client, society, and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:

- Knowing societal and professional responsibilities
- Comprehending the business of building
- Collaborating and negotiating with clients and consultants in the design process
- Discerning the diverse roles of architects and those in related disciplines
- Integrating community service into the practice of architecture

Realm D

Integrated Architectural Solutions: Graduates from NAAB-accredited programs must be able to synthesize a wide range of variables into an integrated design solution. This realm demonstrates the integrative thinking that shapes complex design and technical solutions.

Student learning aspirations include:

- Synthesizing variables from diverse and complex systems into an integrated architectural solution
- Rationalizing environmental stewardship goals across multiple systems for an integrated solution
- Evaluating options and reconciling the implications of design decisions across systems and scales