

# ADVANCED ARCHITECTURAL DESIGN (MS)

College of Architecture, Art and Planning

Program Website (<https://aap.cornell.edu/academics/architecture/graduate/ms-aad/>)

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## Program Description

Cornell's post-professional Master of Science, Advanced Architectural Design program (M.S. AAD) is an intensive, advanced architectural design research program open to individuals holding a B.Arch. or professional M.Arch. degree. The program offers a critical framework for investigating pertinent design concerns, practices, and technologies in 21st-century architecture and urbanism. Three- and four-semester options are available, both starting with a summer semester in New York City and continuing at the Ithaca campus.

The M.S. AAD is designated as a STEM program in Architectural and Building Sciences/Technology making international graduates eligible to extend their F-1 visas for up to three years to work in the United States.

## M.S. AAD 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 program curriculum and comply with all university, college, and program policies; and
- Earn no letter grade lower than C in a design or thesis course.

## Grades

All required courses (design studios, required TI and required open elective classes) must be taken for a letter grade. Additional electives can be taken with either the letter or satisfactory/unsatisfactory (S/U) grading options. Classes completed with an audit grade cannot be applied toward any curricular requirement.

Specifically:

- A grade of C or higher is required for a design studio class (ARCH 7111 ([https://courses.cornell.edu/preview\\_program.php?catoid=60&poid=30593#tt1117](https://courses.cornell.edu/preview_program.php?catoid=60&poid=30593#tt1117)), ARCH 7112 ([https://courses.cornell.edu/preview\\_program.php?catoid=60&poid=30593#tt2986](https://courses.cornell.edu/preview_program.php?catoid=60&poid=30593#tt2986)), and ARCH 7113 ([https://courses.cornell.edu/preview\\_program.php?catoid=60&poid=30593#tt6064](https://courses.cornell.edu/preview_program.php?catoid=60&poid=30593#tt6064))) or thesis class (ARCH 8906 ([https://courses.cornell.edu/preview\\_program.php?catoid=60&poid=30593#tt5404](https://courses.cornell.edu/preview_program.php?catoid=60&poid=30593#tt5404)) and ARCH 8907 ([https://courses.cornell.edu/preview\\_program.php?catoid=60&poid=30593#tt897](https://courses.cornell.edu/preview_program.php?catoid=60&poid=30593#tt897))) to count towards studio degree requirements.

- A letter grade of D- or higher or a grade of S or SX is required for an elective class to be applied toward the open or elective requirements.

## Studio Culture

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

## Advanced Standing/Transfer Credit

There is no advanced standing or transfer credit in the M.S. AAD program. All students must complete all curricular requirements at Cornell's Gensler Family AAP NYC Center and Ithaca campuses during the semesters specified.

## Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 42 (Three-semester option); 57 (Four-semester option); Full-time study

## Program Requirements

The M.S. AAD program has two distinct curricular options, one that is completed in three semesters, and one that is completed in four. Both options have the same initial summer and fall semesters. After the summer semester in New York City, the program continues in Ithaca, where the three-semester option consists of two additional design studios and six elective classes (four TI and two open elective); while the four-semester option requires one additional topic studio, seven elective classes (four TI and three open elective), in addition to their two-semester thesis.

Students wishing to pursue the four-semester curriculum for the M.S. AAD must apply during the fall semester, with a thesis topic representative of their TIs. They must then choose a two-member thesis committee before the end of the semester.

## Curriculum for Three Semester Program

Summer Semester		Hours
June and July in New York City		
ARCH 6110	Computational Thinking as Design Process	3
ARCH 6301	Architectural Territories of Investigation	3
ARCH 7111	Design A	6
<b>Hours</b>		<b>12</b>
Fall Semester		
Ithaca		
ARCH 7112	Design B: Topic Studio	6
Territory of Investigation Elective		3
Territory of Investigation Elective		3
Open Elective		3
<b>Hours</b>		<b>15</b>
Spring Semester		
Ithaca		
ARCH 7113	Design C: Topic Studio	6
Territory of Investigation Elective		3
Territory of Investigation Elective		3

Open Elective	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>42</b>

## Curriculum for Four Semester Program

Summer Semester		Hours
June and July in New York City		
ARCH 6110	Computational Thinking as Design Process	3
ARCH 6301	Architectural Territories of Investigation	3
ARCH 7111	Design A	6
<b>Hours</b>		<b>12</b>
First Fall Semester		
Ithaca		
ARCH 7112	Design B: Topic Studio	6
Territory of Investigation Elective		3
Territory of Investigation Elective		3
Open Elective		3
<b>Hours</b>		<b>15</b>
Spring Semester		
Ithaca		
ARCH 8906	Thesis in Advanced Architectural Design I	9
Territory of Investigation Elective		3
Open Elective		3
<b>Hours</b>		<b>15</b>
Second Fall Semester		
ARCH 8907	Thesis in Advanced Architectural Design II	9
Territory of Investigation Elective		3
Open Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>57</b>

## M.S. AAD Requirement Areas

### Territories of Investigation (TI)

Students in both the three- and four-semester curricular options select a specialized territory of investigation (TI) at the end of their first semester, chosen from among the following four options:

1. **Architecture and Discourse (A+D):** Theory, criticism, publishing, cultural production, design research, historical structures and contemporaneity
2. **Architecture and Ecology (A+E):** Sustainable practices, soft infrastructures, materials research, environmental simulation, computational design, digital fabrication, performance driven design
3. **Architecture and Representation (A+R):** Emerging technologies in simulation, drawing fields, digital and generative design, new cartographies, media spaces, architectural publications and exhibitions, theories of representation
4. **Architecture and Urbanism (A+U):** Urban geography, typological studies, urban theory, networks, infrastructures, urban imaging, ecological urbanism

### TI Electives

TI elective classes may include designated classes within the Department of Architecture, as well as nondepartmental classes that are either designated by the M.S. AAD committee as appropriate for particular

TIs or those approved as relevant to the designated TI by the student's advisor (assigned at matriculation) or thesis committee chair.

### Open Electives

All M.S. AAD students select open electives from any department in the university. Open electives must be 3 or more credits at the 5000-level or higher.

### Studios

In the fall semester, students select a topic studio relevant to their chosen TIs. Those in the three semester program then select an additional topic studio for their spring semester, while those in the four semester program proceed into their two semester thesis for the spring and following fall semesters. In special circumstances, a student in the three-semester program may petition to take an independent design studio during their final semester, insofar as it accommodates their TI and with the approvals of a sponsoring faculty member and the M.S. AAD committee.

## Learning Outcomes

- Develop understanding of how current technological, social, cultural, ecological and economic forces are influencing architectural design, research, practice and pedagogy, specifically as they engage the four "territories of investigation" (TIs): discourse, ecology, representation and urbanism (disciplinary knowledge, information literacy).
- Demonstrate proficiency in computational thinking, ecological design, advanced representation, and fabrication techniques used in architectural design (engagement in the processes of and conception).
- Identify and articulate a specific topic within the four TIs for further investigation in the student's future professional or academic career (critical thinking, communication skills and self-directed learning).
- Exhibit an ability to synthesize representational techniques, computational thinking, current cultural demands, and emergent disciplinary issue within an applied research setting (engagement in the process of discovery or creation; communication skills).