ADVANCED URBAN DESIGN (MS)

College of Architecture, Art and Planning

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

CIP: 04.0902 | **HEGIS:** 02.05 | **NYSED:** 42448

Program Description

The New York City-based Master of Science, Advanced Urban Design program (M.S. AUD) prepares graduates to engage pressing urban, environmental and social issues with the tools of design. The program offers a specialized course of study at the intersection of urban systems, ecologies, technologies, and data in order to ask big questions, to address contemporary wicked problems, and to invigorate public realms.

Participants in the program deepen their understanding of a range of conceptual topics while developing abilities to uncover, visualize, and translate data into designs of material, spatial, and experiential consequence. The program supports citizen-urbanists interested in making a difference through design in pursuit of new forms of engaged spatial practice. Graduates of the program will be agents of urban change, equipped with advanced skills and with expanded knowledge to apply those skills in meaningful ways.

The M.S. AUD is designated as a STEM program in Architectural and Building Sciences/Technology (CIP code 04.0902) making international graduates eligible to extend their F-1 visas for up to three years to work in the United States.

M.S. AUD 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 studio class.

Grades

All required courses must be taken for a letter grade. Electives can be taken under the letter or satisfactory/unsatisfactory grading basis.

Specifically:

- A letter grade of C or higher is required for a design studio class (ARCH 7131 (https://courses.cornell.edu/preview_program.php?catoid=60&poid=30594#tt856), ARCH 7132 (https://courses.cornell.edu/preview_program.php?catoid=60&poid=30594#tt8475), and ARCH 7133 (https://courses.cornell.edu/preview_program.php?catoid=60&poid=30594#tt5589)) to be applied toward the design studio requirement.
- A letter grade of D- or higher is required to apply tools and methods (ARCH 6131 (https://courses.cornell.edu/preview_program.php?catoid=60&poid=30594#tt9569), ARCH 6132 (https://courses.cornell.edu/preview_program.php?catoid=60&poid=30594#tt2937), and ARCH 6133 (https://courses.cornell.edu/preview_program.php?catoid=60&poid=30594#tt298)) and theory / analysis courses (ARCH 6331 (https://courses.cornell.edu/preview_program.php?catoid=60&poid=30594#tt8652), ARCH 6332 (https://courses.cornell.edu/preview_program.php?catoid=60&poid=30594#tt4037), and ARCH 6333 (https://courses.cornell.edu/preview_program.php?catoid=60&poid=30594#tt1616)) toward those degree requirement areas.
- 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 elective requirement.

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.

Advanced Standing / Transfer Credit

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

Program Information

- Instruction Mode: In Person
- Location: New York City, NY
- Minimum Credits for Degree: 42
- Length of Program: 3 semesters; Full-time study

Program Requirements

Fall Semester		**Hours**
New York City		
ARCH 6131	Critical Introduction to Urban Data	3
ARCH 6331	Theories and Analysis I: Introduction	3
ARCH 7131	Studio I: Foundation	6
1 Open elective		3
	Hours	**15**
Spring Semester		
New York City		
ARCH 6132	Intermediate Applications	3
ARCH 6332	Theories and Analysis II	3
ARCH 7132	Studio II: Application	6
1 Open elective		3
	Hours	**15**
Summer Semester		
New York City		
ARCH 6133	Advanced Synthesis	3
ARCH 6333	Theories and Analysis III: Theories of Practice	3

ARCH 7133	Studio III: Synthesis Engagement	6
	Hours	**12**
	Total Hours	**42**

M.S. AUD Requirement Areas

The M.S. AUD program is embedded in New York City and grounds students in the processes by which urban transformation happens through its three instructional tracks: engaged design studios; tools and methods courses; and theory/analysis seminars.

Engaged design studios give students a chance to work on existing challenges with stakeholders and practitioners. Tools and methods courses expose students to a range of skills related to the intersection of design and data. Theory and analysis courses situate the technical components of the program in broader social, political, and economic contexts.

The M.S. AUD program is focused on a coordinated core curriculum. Additionally, students are required to take two open elective courses that draw from an array of eligible offerings at The AAP NYC Gensler Center and select Cornell Tech classes. Open electives must be 3 or more credits at the 5000-level or higher.

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.

Learning Outcomes

Understandings / abilities that graduates of the program would acquire by end of program:

- General understanding professional pathways
- General understanding new / emerging modes of practice
- General understanding the behavior of a wide range of urban systems
- General understanding of current economic models
- General understanding of urban real estate dynamics
- General understanding of scenario planning, future
- General understanding of urban tech
- General understanding of digital tools and critical computational design
- General understanding of sources of big data
- General understanding of AI applications
- General understanding of planning principles in NYC
- General understanding of additional sources of cultural production in NYC (art, gaming)
- Deeper understanding of contemporary urban discourse on ecology, urbanism, infrastructure, publicness
- Deeper understanding of research methodology in the context of urbanism and architecture
- Deeper understanding of contemporary ecological / climate change discourse
- Ability to engage community / stakeholders
- Ability to use scenario / future planning tools
- Ability to communicate effectively through writing
- Ability to engage AI / machine learning applications
- Ability to engage basic coding functions
- Ability to conduct field work, gather data
- Advanced ability to engage mapping / visualization tools
- Advanced ability to connect data / mapping (technology) with design
- Advanced ability to synthesize and visualize complex systems
- Advanced ability to translate research and theory to proposals
- Advanced ability to produce compelling visual, physical and written artefacts in support of larger questions