

ARCHITECTURE (GRADUATE FIELD)

Program Website (<https://aap.cornell.edu/academics/architecture/>)

Field Description

Architectural science (M.S.). Students with an undergraduate degree in architecture, architectural engineering, engineering, or computer science are likely candidates for the graduate program in architectural science. Program objectives are (1) to afford an opportunity for students of architecture to expand their creative design potential by increasing their knowledge and understanding of environmental science and building technologies and (2) to provide a framework within which students who have graduated from other technical disciplines may explore computer science, computer graphics, and computer-aided design methods. Students enrolling for studies in computer graphics use the facilities of the interdisciplinary Program of Computer Graphics.

Ordinarily four terms of residence are required to complete the program of study, depending on the student's background and experience.

Architecture (M.Arch. professional) is a three-and-a-half-year professional Master of Architecture program (M.Arch.) administered by the College of Architecture, Art, and Planning. For more information, consult the College's webpages.

Note on Professional Accreditation

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: bachelor of architecture, master of architecture, and doctor of architecture. A program may be granted an eight-year, three-year or two-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of architecture and master of architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

In order to meet the education requirement set forth by the National Council of Architectural Registration Boards, an applicant for an NCARB certificate must hold a professional degree in architecture from a program accredited by the NAAB; the degree must have been awarded not more than two years prior to initial accreditation.

AAP's M.Arch. (professional) program was formally granted an eight-year term accreditation effective 2013-2021.

Advanced Architecture Design (M.S., Post-professional)

Cornell's Post-professional M.S. in Advanced Architectural Design is an intensive advanced design research (ADR) program. Open to individuals holding a B.Arch. or an M.Arch. (first-professional) degree, the three-semester program beginning the first weekday in June offers a critical framework for investigating pertinent design concerns, practices, and technologies in 21st-century architecture and urbanism.

A structure of core and elective studios and courses allows students to pursue trajectories of inquiry within one of four interrelated territories of investigation:

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

History of architecture and urban development (M.A., Ph.D.).

Applicants should have an undergraduate degree in architecture, archaeology, history, history of art, or anthropology, or appropriate experience in the field. Applicants may apply for the master's or doctoral programs in architectural history or urban development history. Applicants with previous graduate work can be considered for advanced standing. Master's degree candidates in the history of architecture or urban development programs are required to have reading proficiency in at least one modern language other than English; Ph.D. degree candidates must have proficiency in two languages other than English before beginning the second year of study.

Data and Statistics

- Research Master's Program Statistics (<https://gradschool.cornell.edu/about/program-metrics-assessments-and-outcomes/research-masters-program-statistics/?SelectGradField=01>)
- Doctoral Program Statistics (<https://gradschool.cornell.edu/about/program-metrics-assessments-and-outcomes/doctoral-program-statistics/?SelectGradField=01>)

Field Manual

- Manual (<https://aap.cornell.edu/academics/architecture/graduate/haud/phd-haud-graduate-student-handbook/>)

Subject and Degrees

Advanced Architectural Design (Post-Professional) [Administered by A.A.P.]

- Advanced Architectural Design (Post-Professional) [Administered by A.A.P.] (M.S.) (Ithaca) (<https://catalog.cornell.edu/programs/advanced-architectural-design-ms-aad/>)

Advanced Urban Design (Post-Professional) [Administered by A.A.P.]

- Advanced Urban Design (Post-Professional) [Administered by A.A.P.] (M.S.) (Ithaca) (<https://catalog.cornell.edu/programs/advanced-urban-design-ms-aud/>)

Architectural Science

- Architectural Science (M.S.) (Ithaca) (<https://catalog.cornell.edu/programs/architectural-science-ms/>)

Architectural Science - Matter Design Computation

- Architectural Science - Matter Design Computation (M.S.) (Ithaca) (<https://catalog.cornell.edu/programs/architecture-ms-mdc/>)

Design Technology

- Design Technology (M.S.) (Ithaca) (<https://catalog.cornell.edu/programs/design-technology-ms/>)

Design Technology: Studio

- Design Technology: Studio (M.S.) (Ithaca/Cornell Tech (NYC)) (<https://catalog.cornell.edu/programs/design-technology-studio-ms/>)

History of Architecture and Urban Development

- History of Architecture and Urban Development (Ph.D.) (Ithaca) (<https://catalog.cornell.edu/programs/history-architecture-urban-development-phd/>)

Master of Architecture [Administered by A.A.P]

- Master of Architecture [Administered by A.A.P] (M.Arch) (Ithaca) (<https://catalog.cornell.edu/programs/architecture-march/>)

Concentrations by Subject

Advanced Architectural Design (Post-Professional) [Administered by A.A.P]

- advanced architectural design
- theory and criticism of architecture (minor)
- urban design (minor)

Advanced Urban Design (Post-Professional) [Administered by A.A.P]

- advanced urban design

Architectural Science

- building technology and environmental science (minor)
- computer graphics

Architectural Science - Matter Design Computation

- matter design computation

Design Technology

- design technology
- matter design computation

Design Technology: Studio

- design technology
- matter design computation

History of Architecture and Urban Development

- history of architecture
- history of urban development

Master of Architecture [Administered by A.A.P]

- architecture

Faculty

Esra Akcan (<http://aap.cornell.edu/people/esra-akcan/>)

- **Campus:** Ithaca
- **Concentrations:** *History of Architecture and Urban Development:* history of architecture; history of urban development; Design Technology: matter design computation
- **Research Interests:** History, theory, criticism of modern and contemporary architecture and urbanism; global history of art and architecture; architecture in Europe and West Asia, critical theory and historiography

Sean S Anderson (<http://aap.cornell.edu/people/sean-anderson/>)

- **Campus:** Ithaca
- **Concentrations:** *History of Architecture and Urban Development:* history of architecture; history of urban development
- **Research Interests:** Global Modernisms; Architecture and its intersection with humanitarian discourses including human rights and border studies; Histories of technology in architecture and art; Architecture, social equity and community building; Architecture and art curation; Experimental spatial practices; South and Southeast Asian and African architecture and art.

Leighton Beaman (<http://www.human.cornell.edu/people/mlb442/>)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Design Technology:* matter design computation
- **Research Interests:** Inclusive Design; Fabrication Methods and Technologies; Socially and Environmentally Conscious Design Practices; Material Affects in Architecture and Material Culture

Jennifer Birkeland (<http://cals.cornell.edu/jennifer-birkeland/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science:* building technology and environmental science; *Design Technology:* matter design computation
- **Research Interests:** Urban infrastructure in relation to environmental & culturally sustainable systems, landscape/ building, climate change. Fabrication & material research: advance assembly concepts, material science, plant life support.

Thomas J. Campanella (<http://aap.cornell.edu/people/thomas-j-campanella/>)

- **Campus:** Ithaca
- **Concentrations:** *History of Architecture and Urban Development:* history of architecture; history of urban development
- **Research Interests:** residential redevelopment, neighborhood change, gentrification, suburban development/redevelopment

Jose Manuel Castillo (<http://aap.cornell.edu/people/jose-castillo/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science:* building technology and environmental science; *History of Architecture and Urban Development:* history of architecture; history of urban development
- **Research Interests:** Architectural design, Architectural practice, Cities, Housing, Infrastructure, Urbanism, Food & cities, Housing, Urban design & planning

Lily H Chi (<http://aap.cornell.edu/people/lily-chi/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *History of Architecture and Urban Development*: history of architecture; history of urban development; *Design Technology*: matter design computation
- **Research Interests:** architectural design; theory and criticism; theories of architectural representation; history of architectural theory; seventeenth- and eighteenth-century France

David Nicholas Costanza (<http://aap.cornell.edu/people/david-costanza/>)

- **Campus:** Ithaca
- **Concentrations:** *Design Technology*: matter design computation
- **Research Interests:** Building Materials; Building Construction; Building Structures; Embodied Energy, Digital Representation; Digital Fabrication; Geometry, Plastics

Mark R Cruvellier (<http://aap.cornell.edu/people/mark-r-cruvellier/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Advanced Architectural Design (Post-Professional) [Administered by A.A.P.]*: advanced architectural design; *Master of Architecture [Administered by A.A.P.]*: architecture; *Architectural Science*: building technology and environmental science; computer graphics; *History of Architecture and Urban Development*: history of architecture; history of urban development
- **Research Interests:** building technology and environmental science; architectural science and design; structures – tall buildings, bridges; computer visualization of structural behavior

Luben D. Dimcheff (<http://aap.cornell.edu/people/luben-dimcheff/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Design Technology*: matter design computation; **Architectural Science - Matter Design Computation**: matter design computation; **Design Technology**: Studio: matter design computation
- **Research Interests:** interdisciplinary design practices; analytical representation, generative visualization and creative processes

Timur Kamil Dogan (<http://aap.cornell.edu/people/timur-dogan/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science; *Design Technology*: matter design computation
- **Research Interests:** performance driven design workflows and metrics; design computation; urban and building level energy modeling; daylighting; building technology and env. science

John R Elliott (<http://www.human.cornell.edu/people/jre15/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science
- **Research Interests:** Sustainable interior design; sustainable product design; eco-design theory

Maria Gonzalez Pendas (<http://aap.cornell.edu/people/mar-gonz-lez-pend-s/>)

- **Campus:** Ithaca
- **Concentrations:** *History of Architecture and Urban Development*: history of architecture; history of urban development
- **Research Interests:** Architectural history; Architectural theory; History of sciences, and technology; Labor histories, building practices and material epistemologies; Modernity/coloniality, decolonial studies and architecture after empire; 20th century Iberia, Latin America and Colonial Africa; Mestizo modernities; Politics of religion and secularity; Global fascism; Critical theory and ideology critique; Architectural writing and historiography; Public and civically-engaged humanities and design.

Maria Goula (<http://cals.cornell.edu/maria-goula/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science
- **Research Interests:** Coastal resiliency, representations and design theories of coastal landscapes and waterfronts. Performance and dynamics of rural fallow landscapes. Design criticality of contemporary built landscape and architecture.

Donald P. Greenberg (<http://aap.cornell.edu/people/donald-greenberg/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: computer graphics
- **Research Interests:** computer-aided architectural design; computer graphics; architectural structures; architectural technology

Marta H. Wisniewska (<http://aap.cornell.edu/people/marta-h-wisniewska/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Architectural Science*: building technology and environmental science; *Design Technology*: matter design computation
- **Research Interests:** Material Research: Innovative, regenerative and healthy materials for unique and context specific applications, Building Technology: promoting local resources and processes that maximize worker and end-user health while minimizing harmful impacts on the planet, Urban and Rural community-centered transformations in Emerging Territories.

Felix Korbinian Heisel (<http://aap.cornell.edu/people/felix-heisel/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science; *Design Technology*: matter design computation
- **Research Interests:** the circular economy in the built environment, new design and construction methods or circular buildings, survey and activation of the urban mine, closed-loop material practices, and circular business models

Martin Hogue (<http://cals.cornell.edu/martin-hogue/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science
- **Research Interests:** intersection between architecture, landscape and conceptual art; design representation; landscape, cities and film; site histories; camping, travel and tourism; fieldwork and field documentation methods.

Michael Nicholas Jefferson (<http://aap.cornell.edu/people/michael-jefferson/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** Architectural Science: building technology and environmental science; *Design Technology*: matter design computation
- **Research Interests:** Architectural typology, design methodology, shape grammars, systems of bias and influence present in design tools and methods

Saleh Kalantari (<http://www.human.cornell.edu/people/sk3268/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science; *Design Technology*: matter design computation
- **Research Interests:** Evidence-based Design; Virtual Reality; Wayfinding; Cognitive Agent Modeling; Spatial Cognition.

Pamela Karimi (<http://aap.cornell.edu/people/pamela-karimi/>)

- **Campus:** Ithaca
- **Concentrations:** *History of Architecture and Urban Development*: history of architecture; history of urban development
- **Research Interests:** Architectural history, Architectural theory, Collaborative practice, Ecological practice, Participatory and collaborative planning, Sustainability, Architecture and environmental issues, Gender equality and spatial justice, Post-industrial cities, Middle East and North African Studies, Iranian Studies

Katharina Maria Kral (<http://aap.cornell.edu/people/katharina-kral/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Architectural Science*: building technology and environmental science; *Design Technology*: matter design computation
- **Research Interests:** Residential architecture, advanced timber construction, health and well-being in buildings, holistic building performance evaluation including structural optimization and carbon footprint assessment.

D Medina Lasansky (<http://aap.cornell.edu/people/d-medina-lasansky/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *History of Architecture and Urban Development*: history of architecture; history of urban development
- **Research Interests:** Northern Mediterranean architecture and urbanism; nineteenth- and twentieth-century architecture; relationship between popular culture and architecture

Jesse W. LeCavalier (<http://aap.cornell.edu/people/jesse-lecavalier/>)

- **Campus:** Ithaca
- **Concentrations:** *History of Architecture and Urban Development*: history of architecture; history of urban development
- **Research Interests:** Architecture and logistics, Urbanism and logistics, infrastructure, representation, research methodologies in architecture and urbanism

Suzanne Theresa Lettieri (<http://aap.cornell.edu/people/suzanne-lettieri-0/>)

- **Campus:** Ithaca
- **Concentrations:** *Advanced Architectural Design (Post-Professional)* [Administered by A.A.P]: advanced architectural design; theory and criticism of architecture; urban design; *Master of Architecture* [Administered by A.A.P]: architecture
- **Research Interests:** Social equity and the built environment. Early learning and experimental pedagogy. Urban infrastructure in relation to environmental & culturally sustainable systems, landscape/building, climate change.

Leslie Lok (<http://aap.cornell.edu/people/leslie-lok/>)

- **Campus:** Ithaca
- **Concentrations:** *Design Technology*: matter design computation
- **Research Interests:** architecture and urbanism, intersection of housing, urbanization and mass-customized construction methods, material practices

Farzin Lotfi-Jam (<http://aap.cornell.edu/people/farzin-lotfi-jam/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: computer graphics; *Design Technology*: matter design computation
- **Research Interests:** Urban Technologies; Urbanism; Cities; Computation and New Media; Critical Spatial Practice

Martin Fields Miller (<http://aap.cornell.edu/people/martin-miller/>)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Design Technology*: matter design computation
- **Research Interests:** computational design, digital fabrication, emerging technologies and culture

Jennifer Newsom (<http://www.dreamthecombo.com/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science
- **Research Interests:** architectural design, architectural representation, contemporary architectural theory, Black spatial practices.

Caroline Ann O'Donnell (<http://aap.cornell.edu/people/caroline-odonnell/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science
- **Research Interests:** Ecological design; Non-linear materiality; Legibility/Perception

Peter Dwayne Robinson (<http://aap.cornell.edu/people/peter-robinson/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science
- **Research Interests:** Architecture; Urban design; Community Engagement; Participatory Design; Youth Engagement; Design Strategy; Urbanism

Jenny Sabin (<http://aap.cornell.edu/people/jenny-sabin/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Design Technology*: matter design computation
- **Research Interests:** architectural design and emerging technologies; architecture and science; advanced materials and fabrication; design computation; ecological design and architectural science; visualization

Andrea Lee Simitch (<http://aap.cornell.edu/people/andrea-l-simitch/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science
- **Research Interests:** architectural design; urban design; visual studies

Val Kevin Warke (<http://aap.cornell.edu/people/val-k-warke/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science
- **Research Interests:** architectural design; theory of architecture; urban design

Anne Loftin Weber (<http://cals.cornell.edu/anne-weber/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science

J. Meejin Yoon (<http://aap.cornell.edu/people/j-meejin-yoon/>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science; *Design Technology*: design technology; *Design Technology*: Studio: design technology
- **Research Interests:** Architectural design; Design technology

Sasa Zivkovic (<http://aap.cornell.edu/people/sasa-zivkovic/?department=8>)

- **Campus:** Ithaca
- **Concentrations:** *Architectural Science*: building technology and environmental science; *Design Technology*: matter design computation
- **Research Interests:** robotic building construction; digital fabrication and material design; design computation; architecture and form; visual representation