

RENSSELAER | ARCHITECTURE

GRADUATE ACADEMIC PROGRAMS INFORMATION

GRADUATE



PROGRAMS

MASTER OF ARCHITECTURE - PROFESSIONAL PROGRAM

MASTER OF SCIENCE IN ARCHITECTURE - POST-PROFESSIONAL PROGRAM

MASTER OF SCIENCE AND PH.D. IN ARCHITECTURAL SCIENCES (ACOUSTICS CONCENTRATION)

MASTER OF SCIENCE AND PH.D. IN ARCHITECTURAL SCIENCES (BUILT ECOLOGIES CONCENTRATION)

MASTER OF SCIENCE AND PH.D. IN ARCHITECTURAL SCIENCES (LIGHTING CONCENTRATION)

School of Architecture Contact

Graduate Admissions: gradarch@rpi.edu

Web: arch.rpi.edu

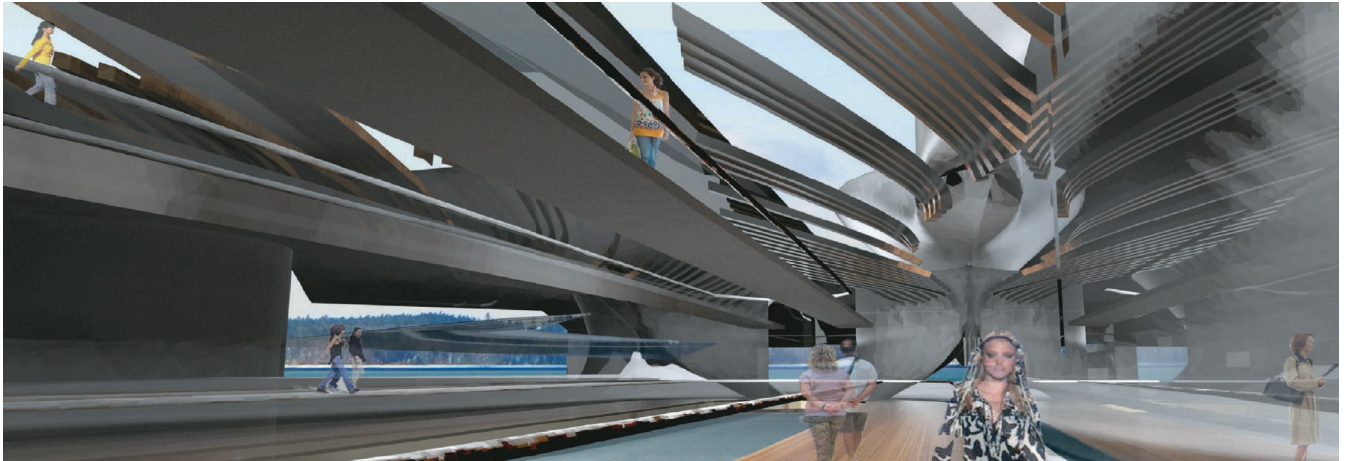
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RENSSELAER | ARCHITECTURE

MASTER OF ARCHITECTURE- PROFESSIONAL PROGRAM



PROGRAM DESCRIPTION: The practice of architecture in the 21st century is increasingly driven by heightened cultural, social and environmental issues. Our top tier program offers a comprehensive curriculum comprised of emerging technologies and materials, environmental research, and a range of cross disciplinary collaborations. Situated within the oldest technological institute in the US, we draw from the vast resources of science and engineering expertise in support of the school's commitment to architecture as a project of interdisciplinary and social engagement. We envision the future of architecture transformed by emerging design research and innovation in the service of a socially vibrant and sustainable built environment.

MASTER OF ARCHITECTURE (6 Semesters): The Master of Architecture program is a three year NAAB accredited professional degree program in architecture, open to applicants with a baccalaureate in any discipline or field of study. Students apply from the liberal arts, design, science, and engineering disciplines. The first year of the curriculum constitutes the core foundation of design, technology, history and theory courses. The second two years build on the foundation with integrated advanced design studios and seminars.

M. ARCH ADVANCED STANDING (4 Semesters): Applicants holding a bachelor of science in architecture degree may be considered for advanced standing. Upon review of transcript and portfolio, successful candidates may have up to two design studios waived. A faculty committee will review additional course waiver requests for advance standing in to the second year of the three-year program. Candidates admitted with advanced standing typically complete degree requirements within two years of full time enrollment.

RESEARCH STUDY AREAS: Students participate in advanced building science research through a semester long program at the school's Center for Architecture Science and Ecology (CASE) located in New York City. Additional course offerings in Architectural Acoustics and the Lighting are available for an expanded interdisciplinary experience.

The M.Arch program is designated as a STEM program in Architectural and Building Sciences/Technology (CIP code 04.0902) thus granting international graduates eligibility in extending their F-1 visas for up to three years for professional work experience in the United States.

INTRODUCTION TO DIGITAL CONSTRUCTS: Our program offers an optional two-week Digital Workshop for all incoming students. The workshop takes place prior to the fall semester and provides comprehensive introduction to a wide range of software, including Rhino, Grasshopper, V-Ray, Pepakura Designer, Adobe programs such as Illustrator, Photoshop, and InDesign, as well as a working knowledge of digital fabrication technologies including 3D-printing, CNC-milling, and laser-cutting.

Deadline to apply is January 1. First consideration will be given to applications received by this date.

Rolling Application Deadline is March 15.

View current curriculum here: <http://march1.arch.rpi.edu/academic/curriculum/>

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For More Information Visit
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RENSSELAER | ARCHITECTURE

M.S. IN ARCHITECTURE - POST PROFESSIONAL PROGRAM



PROGRAM DESCRIPTION: Fifteen years ago, Nobel Prize-winning atmospheric chemist Paul Crutzen announced that the world had entered a new geological age, what he termed the Anthropocene, a period characterized by the long-term effects of industrialization on planet Earth. As such, this period marks a fundamental shift in human-nonhuman relations; whether manifest in the form of coastal flooding or mega-droughts, we have entered a new period of environmental uncertainty in which the conventional boundaries between nature and culture have been rendered ambiguous. Geofutures seeks to engage such uncertainty by posing the following two questions: Should architecture, along with the disciplines of landscape architecture and urban design, embark on establishing new affiliations beyond the human? And in doing so, might we convert crisis into opportunity by harnessing the pressures of a planet at risk to generate a broad spectrum of possible, if not probable, urban and architectural futures for the twenty-first century?

DEGREE DESCRIPTION: The Geofutures Master of Science in Architecture is a one-year postgraduate program intended for students who already hold a professional undergraduate degree in architecture (B.Arch or equivalent) and would like to obtain a masters degree. The program is also open to students interested in advanced graduate study who hold an undergraduate non-professional degree in a related field of study in the arts, sciences, or humanities.

The MArch (or MS Architecture) program 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 in order to work in the United States.

INTRODUCTION TO DIGITAL CONSTRUCTS: The School of Architecture offers an optional two-week Digital Workshop for all incoming students in both the Master of Science in Architecture program. This important preparatory workshop, which takes place prior to the fall semester, is instrumental in helping new students develop the software and fabrication skills necessary to excel in each respective program. The workshop provides a comprehensive introduction to a wide range of software, including Rhino, Grasshopper, V-Ray, Pepakura Designer, Adobe programs such as Illustrator, Photoshop, and InDesign, as well as a working knowledge of digital fabrication technologies including 3D-printing, CNC-milling, and laser-cutting.

ADDITIONAL INFORMATION: Please visit <http://geofutures.arch.rpi.edu> for more information about the program, including examples of student work and faculty bios, as well as online application instructions. The GRE General Test is NOT required. Merit scholarships valued at 40% of the annual tuition are available to qualified applicants.

Deadline to apply is January 1. First consideration will be given to applications received by this date.

Rolling Application Deadline is March 15.

View current curriculum here: <http://geofutures.arch.rpi.edu/academic/curriculum/>

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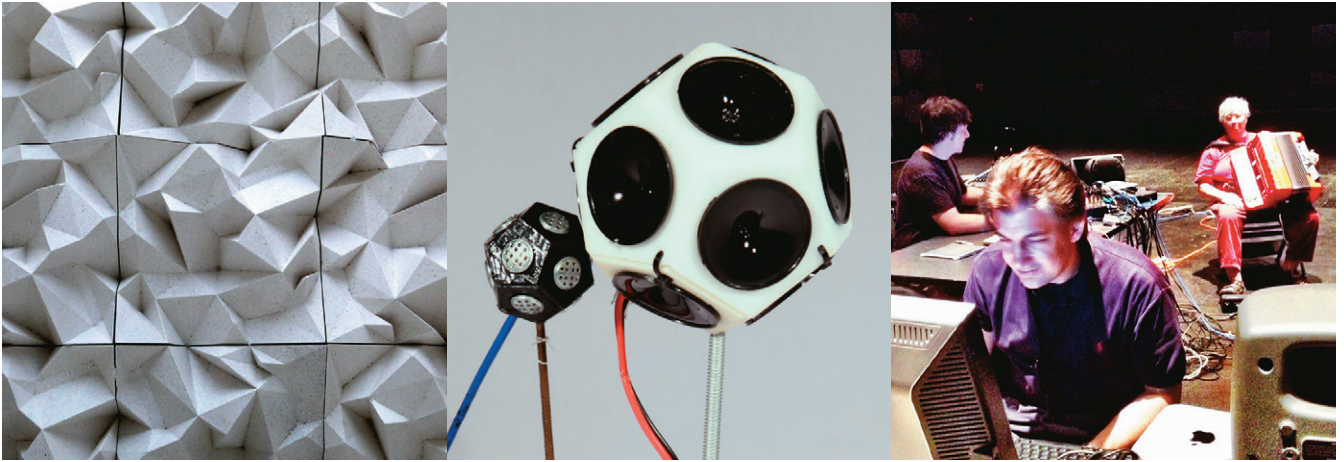
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RENSSELAER | ARCHITECTURE

M.S. AND PH.D. IN ARCHITECTURAL SCIENCES - ACOUSTICS



PROGRAM DESCRIPTION: Founded in 1998 by the late Dr. J. Christopher Jaffe '49, the Graduate Program in Architectural Acoustics is now the nation's largest graduate program dedicated to Architectural Acoustics and its related fields. The program is actively involved in graduate education and advanced research in acoustics and perceptions of the built environment. Research includes the physical and numerical modeling of indoor and outdoor sound propagations, where indoor sites include concert halls, performance venues, acoustically coupled-volume spaces, and workspaces; and outdoor sites include urban settings.

The Program's strong concentration in Aural Architecture focuses on the design of acoustical spaces from a perceptual viewpoint rather than through traditional methods, which are constrained by physics. Such a radical approach is often necessary in a world where virtual acoustics are no longer limited by physical laws. Aural Architecture is also often useful in traditional concert hall design. The underlying concept of Aural Architecture is to understand human perception and, before an actual room is designed, to identify the needs of its users through scientific psychophysical experiments.

The program develops the knowledge and skills required for advanced consultancy, research, and teaching. Graduates are active in leading acoustical practices worldwide and take positions at research centers and national laboratories. The PhD program provides a unique opportunity in architectural acoustics by generating scientific research for advanced work in room acoustics, psychoacoustics, acoustic and vibration measurement techniques, noise control, and sound reinforcement. Research is supported by the National Science Foundation and other federal agencies. The program has an ongoing relationship with Rensselaer's innovative Experimental Media and Performing Arts Center. This research-based program provides students with the knowledge and skills needed for advanced practice and applied research in Architectural Acoustics and its related fields.

The MS and PhD programs are designated as STEM programs 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 in order to work in the United States.

ELIGIBILITY: The program offers an interdisciplinary curriculum appropriate to applicants from engineering, science, humanities, architecture, and the arts. Many students are accomplished musicians.

Deadline to apply is January 1. First consideration will be given to applications received by this date.
Rolling Application Deadline is March 15.

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RENSSELAER | ARCHITECTURE

M.S. AND PH.D. IN ARCHITECTURAL SCIENCES - BUILT ECOLOGIES



PROGRAM DESCRIPTION: The PhD and Masters programs in Built Ecologies at the Center for Architecture Science and Ecology (CASE) are a response to the unprecedented potential to cross-pollinate experimental methodology and knowledge from a diverse array of research cultures towards new ideas for the built environment. New modes are sought for considering the interdependent relationships between our built systems and the so-called “natural” systems with which they intersect. As challenges for creating environments intensify, the compartmentalization that characterized experimentation and research within academia becomes less and less tenable, just as the environmental challenges become ever more vast. Transformative methods are needed to metabolize energy, water, and materials in new ways that support biodiversity and well-being.

The Built Ecologies program aims to embrace an inclusive research agenda to re-integrate technical modes of inquiry within the theoretical, cultural, and aesthetic aspirations of architecture. Traditionally buildings have been viewed as “protective” barriers mitigating the forces of wind, temperature, light and humidity. Built Ecologies shifts this conceptual frame work to consider buildings as mediators that intersect and engage energy flows, and ultimately as translators of ambient energetic forces that can capture, transform, store and redistribute available energy flows as regenerative, rather than detrimental, to the built environment.

The program offers MS and PhD degrees in Architectural Sciences with a concentration in Built Ecologies. Coursework is taught in New York City at the Center for Architecture Science and Ecology (CASE), a unique educational and research program with a broad set of industry partnerships.

The MS and PhD programs are designated as STEM programs 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 in order to work in the United States.

ELIGIBILITY: The Built Ecologies program attracts students with backgrounds in architecture and design, engineering, physics, biology, and ecology.

Deadline to apply is January 1. First consideration will be given to applications received by this date.
Rolling Application Deadline is March 15.

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RENSSELAER | ARCHITECTURE

M.S. AND PH.D. IN ARCHITECTURAL SCIENCES - LIGHTING



PROGRAM DESCRIPTION: The Graduate Program in Lighting offers the premier Masters and Ph.D. degrees in lighting to those seeking a multi-disciplinary graduate education at the Rensselaer Lighting Research Center (LRC), the world's leading center for lighting research and education. Two degree options provide flexibility for those wishing to pursue graduate-level study in the field of lighting. Applicants considering the Ph.D. degree are encouraged to begin by enrolling first in the M.S. in Lighting with the option of continuing on to the Ph.D. This allows students to become better acquainted with the work of the LRC and select an area of research concentration for their advanced studies.

The Masters of Science in Lighting is a two-semester, multidisciplinary, 30-credit program that immerses students in lighting research, technology, human factors, application, and design. Upon graduation, students have the option to participate in a 3-month PAID career externship with one of many leading lighting organizations that have agreed to host LRC students. Students explore emerging trends in lighting design and applications including customization and data analytics in areas such as the Internet of Things (IoT) and networked/connected lighting, 3D printing of lighting components, lighting for circadian health and wellbeing, lighting for plant health, aviation and automotive lighting, and other topics in lighting technologies. The degree allows for a comprehensive, "hands-on" study of lighting which culminates in a master's project in the second semester during which each student studies a particular area of lighting in-depth, directly with a faculty adviser.

The Ph.D. in Architectural Sciences with a Concentration in Lighting is the highest degree available in the field of lighting. This degree allows students from a wide range of backgrounds to undertake concentrated research in a select area of lighting study.

The MS and PhD programs are designated as STEM programs 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 in order to work in the United States.

ELIGIBILITY: The LRC graduate programs attract students with accredited bachelor's and/or master's degrees in lighting, architecture, engineering, physics, life sciences, industrial design and other related fields.

Deadline to apply is January 1. First consideration will be given to applications received by this date.
Rolling Application Deadline is March 15.

CONTACT INFORMATION

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