

**COLUMBIA
UNIVERSITY
BULLETIN
2014-2015**

**GRADUATE
SCHOOL OF
ARCHITECTURE
PLANNING AND
PRESERVATION**

Directory

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DEAN'S STATEMENT

THE FUTURE OF THE ARCHITECT

Education is all about trust. The best teachers embrace the future by trusting the student, supporting the growth of something that cannot be seen yet, an emergent sensibility that cannot be judged by contemporary standards. A school dedicated to the unique life and impact of the thoughtful architect must foster a way of thinking that draws on everything that is known in order to jump into the unknown, trusting the formulations of the next generation that by definition defy the logic of the present. Education becomes a form of optimism that gives our field a future by trusting the students to see, think, and do things we cannot.

This kind of optimism is crucial at a school like the GSAPP at Columbia. The students arrive in New York City from around 55 different countries armed with an endless thirst for experimentation. It is not enough for us to give each of them expertise in the current state-of-the-art in architecture so that they can decisively assert themselves around the world by producing remarkable buildings, plans, and policies. We also have to give them the capacity to change the field itself, to completely redefine the state-of-the-art. More than simply training architects how to design brilliantly, we redesign the figure of the architect. Columbia's leadership role is to act as a laboratory for testing new ideas about the possible roles of designers in a global society. The goal is not a certain kind of architecture but a certain evolution in architectural intelligence.

Architecture is a set of endlessly absorbing questions for our society rather than a set of clearly defined objects with particular effects. Architects are public intellectuals, crafting forms that allow others to see the world differently and perhaps to live differently. The real gift of the best architects is to produce a kind of hesitation in the routines of contemporary life, an opening in which new potentials are offered, new patterns, rhythms, moods, sensations, pleasures, connections, and perceptions. The architect's buildings are placed in the city like the books of a thoughtful novelist might be placed in a newsstand in a railway station, embedding the possibility of a rewarding detour amongst all the routines, a seemingly minor detour that might ultimately change the meaning of everything else. The architect crafts an invitation to think and act differently. GSAPP likewise cultivates an invitation for all the disciplines devoted to the built environment to think differently. Its unique mission is to move beyond the highest level of professional training to open a creative space within which the disciplines can rethink themselves, a space of speculation, experimentation, and analysis that allows the field to detour away from its default settings in order to find new settings, new forms of professional, scholarly, technical, and ethical practice.

The heart of this open-ended laboratory is the design studios. All the overlapping and

interacting programs at the school-Architecture, Urban Design, Historic Preservation, Urban Planning, and Real Estate Development-teach design and are united in their commitment to the global evolution of the 21st century city. Every semester, the school launches more than 35 explorative studio projects that head off in different directions before reporting back their findings in juries, exhibitions, and publications that stimulate an intense debate and trigger a new round of experiments. With a biodiversity of continually evolving research trajectories, the school operates as a multi-disciplinary think tank, an intelligent organism thinking its way through the uncertain future of the discipline and the global society it serves.

As in any other architecture school, the real work is done in the middle of the night. Avery Hall, the school's neoclassical home since 1912--with its starkly defined symmetrical proportions communicating to the world the old belief that the secret of architectural quality is known, universal, and endlessly repeatable--now acts as the late night incubator of a diversity of possible futures. At its base is Avery Library, the most celebrated architectural collection in the world, a remarkable container of everything architects have been thinking about in the past, neatly gathered within the traditional quiet space of a well organized archive. Up above are the dense and chaotic studio spaces bristling with electronics and new ideas. Somewhere between the carefully catalogued past and the buzz of the as yet unclassifiable future, the discipline evolves while everyone else sleeps. Having been continuously radiated by an overwhelming array of classes and waves of visiting speakers, symposia, workshops, exhibitions, and debates, the students artfully rework the expectations of their discipline.

The pervasive atmosphere at GSAPP, the magic in the air from the espresso bar to the pin-up walls to the front steps to the back corner of the big lecture hall, is the feeling of being on the cutting edge, straddling the moving border between the known and the unknown in our field. It is hopefully an open questioning atmosphere in which students are able to do work that teaches their teachers. In the end, a school's most precious gift is its generosity towards the thoughts that the next generation has yet to have.

Mark Wigley
Dean, GSAPP

HISTORY

SCHOOL OF ARCHITECTURE

One of the first architecture schools in America, Columbia was established in 1881 by William R. Ware. A former student of Richard Morris Hunt (the first American to attend the École des Beaux-Arts in Paris), Ware approached architectural education from a humanistic rather than a technical point of view. His appointment capped a distinguished career as a practicing architect, scholar, and teacher; it established the precedent, followed almost exclusively since then at Columbia, of entrusting the School's direction to architects with sustained professional experience.

In its early years, Columbia's was the leading preparatory program for would-be architects intent on studying at the École des Beaux-Arts in Paris. But by 1902 it had matured into a full-scale School of Architecture. Ware retired in 1903, to be succeeded by A. D. F. Hamlin. Hamlin stepped down from the position in 1912, when, with an enrollment of 140, the School moved into its new quarters, Avery Hall, designed by McKim, Mead, and White. Hamlin was succeeded by Austin Willard Lord (1912–1915) and William Harry Carpenter (1915–1919).

In 1931, William A. Boring, who had been the School's director since 1919, became the first dean of what was then called the Faculty of Architecture. Under Boring and especially under his successor Joseph Hudnut, who took over in 1933, the curriculum was broadened dramatically. While the pre–World War I era had been dominated by the academic classicism of Ware, Hamlin, and such leading professionals as Charles Follen McKim, Thomas Hastings, and Henry Hornbostel, all of whom taught at the school, Boring and especially Hudnut encouraged the then nascent modernism and incorporated studies in town planning. Important studio critics, including the urbanistically inclined skyscraper architects Harvey Wiley Corbett and Wallace K. Harrison, joined the English town planner Raymond Unwin and the architectural historian Talbot Hamlin to create an environment in tune with the dramatic social and economic changes of the interwar years.

With Hudnut's departure for Harvard in 1935, the School, under the new dean, Leopold Arnaud, entered into a gradual decline that only began to reverse itself in the late 1950s when provocative studio critics Percival Goodman and Alexander Kouzmanoff, as well as the historian James Marston Fitch, gave the program new energy. Fitch's courses in architectural history blossomed into a program in historic preservation, established in 1966 as the first at an American university. Despite the vagaries of the postwar curriculum and an ambiguous commitment to graduate-level architectural education, the School continually benefited from New York City's prominence as a world capital and attracted many foreign students, some of whom would grow to professional prominence, including Romaldo Giurgola and Michael McKinnell.

After the short and vital but stormy tenure of Charles Colbert (1960–1963), Kenneth A.

Smith, an engineer, was appointed dean, and in 1965 the School was organized along divisional lines, with planning and architecture each having its own chairperson. Charles Abrams was the first planning chair and Romaldo Giurgola, the first for architecture. Abrams, with his wide experience in New York real estate and social planning, and his deep humanity, forged a program that balanced statistical analysis with compassion and earthy pragmatism. Giurgola built upon the design strengths of Kouzmanoff and Goodman, bringing into the studios as first-time teachers such bright young architects as Gio Pasanella, Jacqueline Robertson, Robert Kliment, and Ada Karmi Melamede.

The School's students played a central role in the protests that engulfed the University in the spring of 1968. While the tumultuous campuswide demonstrations of that watershed year were triggered by a concern for America's role in international affairs, the architecture students played a particularly strong role in focusing the debate on the University's relationship to its neighbors in the Morningside Heights and Harlem communities. In addition, the students challenged the University's lackluster building program, protesting the construction of Uris Hall and the proposed gymnasium for Morningside Park.

James Stewart Polshek became dean in 1972. With strong professional connections with designer-architects, preservationists, and planners, Polshek tapped the School's inherent strengths and refined the graduate program while healing the wounds left over from the previous decade. He reshaped the design faculty and enriched the School's offerings in architectural history and theory, which were under the leadership of Kenneth Frampton, who also came to Columbia in 1972. As important, Polshek extended the School's reach both within and beyond the University, establishing a strong program of public lectures featuring leading architects, planners, and politicians; creating special programs for undergraduates in Columbia and Barnard Colleges; and helping establish the Temple Hoyne Buell Center for the Study of American Architecture in 1983. Under Polshek and his faculty, including especially Frampton, Giurgola, and Robert A. M. Stern, Columbia became an important focal point in the postmodernist debate.

Bernard Tschumi became dean in 1988, and the School's architecture programs, reflecting changing concerns in design, became more theoretical as they began to take on a more international flavor, capitalizing as never before on New York's status as a world city. To stimulate a sense of invention at the School and to use it as a laboratory for ideas, Tschumi gave junior faculty the freedom to be creative, expanding their research in the context of their studios. Sensing the role that computers would play in architectural design today, he fostered one of architecture's most significant forays into the digital age. During his time as dean, Tschumi tenured faculty in architectural theory as well as practice, including Stan Allen, Steven Holl, Laurie Hawkinson, and Mark Wigley, with Frank Gehry as Distinguished Professor. Under Tschumi, the School also developed a highly successful post-professional program, the degree in Advanced Architectural Design, as well as a Ph.D. in architecture.

Mark Wigley became dean in 2004 after a year as interim dean, and the School began to expand the experimental culture established by Bernard Tschumi. The collaborative links between all the programs and between the School and the wider University and professional community were intensified. New forms of aesthetic, technical, philosophical, and ethical engagement were cultivated. Research and publication grew into a major part of the School with the establishment of a whole new set of active research labs. With a revived curriculum and faculty, the School continues to foster a dynamic evolution of architectural artistry, intelligence, and technical expertise in partnership with its students.

FACILITIES

A GLOBAL NETWORK

New York

On the Columbia University Morningside Heights campus, the GSAPP occupies its own building, Avery Hall; as well as space in the adjacent building, Fayerweather Hall; in the Avery Extension, which connects the two; in Schermerhorn Hall Extension; and in Buell Hall, directly south of Avery Hall. This complex houses design studios, classrooms, computer studios and computer labs, lounges, exhibition galleries, a fabrication shop, output shop, audiovisual facilities, a slide library, a three-hundred-seat auditorium, and a seventy-seat lecture hall.

AVERY LIBRARY

The resources of the world's leading architecture library, the Avery Architectural and Fine Arts Library, are located in Avery Hall and the Avery Extension; they are available to the students of the School. Founded by Samuel Putnam Avery in 1890 as a research collection of books on architecture and the related fields, it has since grown into what can be called the national library of the profession. It is ranked by scholars from all over the world as the outstanding international research center on the history of architecture. Its holdings consist of more than 240,000 books and periodicals on architecture, urban planning, art history, historic preservation, archaeology, the decorative arts, and a broad variety of related background material. The contents range from the first published book on architecture, L. B. Alberti's *De Re Aedificatoria* (1485), to a comprehensive collection of books on contemporary architectural movements. In addition, the library has more than 300,000 original architectural drawings, collections of prints, and rare photographic material and archives. Avery Library also houses the Avery Index to Architectural Periodicals, the most comprehensive periodical index in the field. It is now available online as well as in print form. The Ware Memorial Library is designed as a circulating branch of the library for everyday use by the students. It contains more than eight thousand books on architecture and planning from the United States and Europe and is located in the Avery Library.

STUDIO - X GLOBAL

Global Network Programming
Director: Malwina Łyś-Dobradin
Columbia University GSAPP
1172 Amsterdam Avenue, 400 Avery Hall
New York, New York 10027
U.S.A.

In recent years, GSAPP has used the label "Studio-X" to refer to its most advanced laboratories for exploring the future of cities. The label conveys the sense that a whole new platform for research and debate is needed to face the array of urgent questions that will face the next generation of designers.

Each Studio-X is organized around the traditional setting of the design studio found in architecture schools all over the world: a simple open loft-like space that fosters collaborative exploration, an empty room that welcomes new people and new ideas.

This central workspace is supplemented by: a book gallery and reading room that displays unique research publications from around the different Studio-X locations not found in a typical bookstore; an interactive video interface showing what is happening in the other Studio-X spaces in real time; a gallery space displaying unique exhibitions curated locally or between Studio-X spaces; a space for public lectures; a meeting room for more private discussions or video-conferencing; a kitchen/coffee shop; and offices for the staff or visiting scholars/designers.

Each Studio-X is a cultural center that supports close personal interactions between people that might not normally be together. At the same time, the space is equipped with the latest technology to take advantage of Columbia's expertise in digital design and data visualization to draw on the widest array of global resources and communicate ideas to the widest possible audience. The local director of each Studio-X acts as the curator of a continuous array of projects, workshops, lectures, seminars, symposia, exhibitions, and performances with a small staff helping to tie the daily operations of the space to the surrounding city. In key moments, all the Studio-X spaces would be linked in a single real-time global workshop allowing unprecedented bursts of creativity.

AMMAN LAB

Curator: Nora Akawi
5 Moh'd Al Sa'd Al-Batayneh Street
King Hussein Park
P.O. Box 144706
Amman, Jordan 11814

GSAPP's Amman Lab, with studio workshop, seminar room, offices and exhibition

space, opened within the Columbia Global Centers | Middle East in March 2009 and has acted as the site for student workshops, public lectures, seminars and exhibitions investigating a wide range of issues in urban planning, historic preservation, and advanced architectural design in Jordan and the region.

STUDIO-X BEIJING

Director: Li Hu
A103, 46 Fangjia Hutong,
Andingmen Inner Street,
Dongcheng District
Beijing, China, 100007
Tel: +86.10.64028682

GSAPP's Studio-X Beijing opened in March 2009 in a large factory building in a new art zone near the historical center of the city. The site is host to visiting studios, workshops, symposia, exhibitions and events that attract audiences between 100 and 300 people. A series of high profile and high energy activities in the unique old town hutong space have established Studio-X Beijing's reputation as a place for the exchange of ideas and experimental thinking about the future of cities. Multiple NGO and grassroots events sponsored by Studio-X Beijing facilitate engagement with the local community and major collaborations are now beginning in the space, linking artists and architects, developers and preservationists, including work with the Urban China Initiative. As Studio-X Beijing continues to develop, it will evolve into an active research center addressing key challenges including sustainability within rapidly urbanizing China.

STUDIO-X MUMBAI

Director: Rajeev Thaker
Kitab Mahal
192, D N Road
Fort Mumbai 400 001
Tel: +91 9820401836

Studio-X Mumbai opened its doors to the public in February 2011 with Architecture of Consequence, an international traveling exhibition about the role of architecture in social innovation and sustainability. The space has quickly become a major hub of vibrant debate. Located on the 4th floor of the Kitab Mahal building near the Victoria Terminus railway station in historic downtown Mumbai, Studio-X Mumbai explores the built environment by hosting a variety of events that address issues such as contemporary architectural practice, sociology, public art, and the impact of technology on the city. It is the most democratic of public spaces for citizens who are eager to engage with issues related to the future of cities.

STUDIO-X NEW YORK

Directors: Nicola Twilley
180 Varick Street, Suite 1610
New York, New York 10014
Tel: +001.212.989.2398

GSAPP's Studio-X New York was established in New York in summer 2008 in a lower Manhattan industrial building in a neighborhood largely occupied by creative industries. It quickly became a major node of activity in the city. During the day, an ever-changing array of people work in collaborative teams on exhibitions, reports, books, magazines, competitions, seminars, and workshops. In the evening there is a great density of events, with lectures, debates, launches, performances, and exhibition openings.

STUDIO-X RIO DE JANEIRO

Director: Pedro Rivera
Praça Tiradentes, 48
Rio de Janeiro - RJ, 20060-070
Brazil
Tel: +55.21.2266.0452

Since March 2011, Studio-X Rio occupies a three-storey building at Praça Tiradentes, a square in Rio de Janeiro's downtown area. The space brings together professionals, academics, decision makers, students, and the general public to confront our most pressing urban challenges. We are particularly interested in how cross-cultural, cross-disciplinary, and cross-continental exchanges can affect and inform each other when facing the ongoing urban transformations of the city, the country and Latin America.

STUDIO-X JOHANNESBURG

Director: Mpho Matsipa
Fox Street Studios second floor
280 Fox Street (Corner Fox/Kruger),
The Maboneng Precinct Johannesburg
South Africa

Studio-X Johannesburg will further deepen Columbia University's longstanding relationship with South Africa and foster new collaborations with partners from across the African continent. Our aim is to create a creative public platform that will explore alternative imaginaries of the city, with particular focus on the future of global connection, individual and collective acts of agency and productive collaboration. In the face of the official narratives of apocalyptic urbanization and global crisis, Studio-X Johannesburg will cultivate encounters amongst researchers, urbanists, theorists, filmmakers, artists, activists, architects and policy makers, to explore and give expression to the creative and emergent urban visions and practices of the future.

STUDIO-X ISTANBUL

Director: Selva Gürdoğan
Meclis-i Mebusan Caddesi 35A
34433 Salıpazarı İstanbul
Turkey
Tel: +90 (212) 292 07 47

Studio-X Istanbul opened in November 2013 in a two-storey building at Salı pazarı, in Istanbul's downtown area. We develop free events such as lectures, workshops, seminars and exhibitions that foster discussion on the built environment and research projects that generate new forms of sharing the urban public space.

SÃO PAULO LAB

Director: Maria Augusta Bueno
180 Varick Street, Suite 1610
New York, New York 10014
Tel: +001.212.989.2398

São Paulo Lab collaborates closely with Studio-X Rio de Janeiro to examine the urban challenges facing metropolises of the 21st century. The Studio-X global network allows the best minds from São Paulo to think together with the best minds at Columbia University and around the world to exchange ideas, technology, expertise, and culture. In the summer of 2010, São Paulo Lab and Studio-X Rio collaborated with the Netherlands Architecture Institute on professional workshops targeting regional issues – Rio on Unsolicited Architecture, São Paulo on Flooding. The workshops were further built upon and exhibited during the 2011 Bienal de Arquitetura de São Paulo focused on the theme of Architecture and Citizenship.

TOKYO LAB

Director: Daisuke Hirose
M2, Shibaura House
3-15-4 Shibaura Minato-ku
Tokyo 108-0023
Japan

Tokyo Lab is a hub for architectural activity located at Shibaura House, a space designed by Kazuyo Sejima in a lively neighborhood of the city. Since 2011, it has hosted creative events with local and international architects, coders and hackers, as well as numerous parties and gatherings.

Centers

THE TEMPLE HOYNE BUELL CENTER FOR THE STUDY OF AMERICAN ARCHITECTURE

Director: Reinhold Martin

Program Coordinator: Jacob Moore

Columbia University's Temple Hoyne Buell Center for the Study of American Architecture was founded in 1982. Its mission is to advance the interdisciplinary study of American architecture, urbanism, and landscape. A separately endowed entity within the Graduate School of Architecture, Planning and Preservation, it sponsors research projects, workshops, public programs, publications, and awards.

CENTER FOR URBAN REAL ESTATE (C.U.R.E.)

Director: Vishaan Chakrabarti

Research Director: Jesse M. Keenan

As a center for research and thought leadership, CURE builds upon a platform of direct industry engagement through conferences, symposia, publications and consulting activities and undertakes a dedicated research agenda that advocates for design-intelligent urban development. Building upon CURE's intellectual foundation, the center offers GSAPP faculty and students a cross-disciplinary approach that integrates theory and practice to solve unique development problems.

ARTHUR ROSS ARCHITECTURE GALLERY

Director: Mark Wasiuta

The core of the GSAPP Exhibitions program is the Arthur Ross Architecture Gallery. The gallery is simultaneously a testing ground for exploring new approaches to architectural exhibitions, and a reflexive space for considering and analyzing architecture as it has been formed through exhibition. Different strains of exhibition experiments appear in the gallery, sometimes through the coordination and exposure of archival, historical or thematic architectural research projects, or through installation and curatorial strategies themselves. One of the more porous

spaces within the school, an organism within an ecology of disciplinary exchanges, the gallery is a site for staging exhibitions that leave the school to travel to other institutions and to museums elsewhere, and is also an aperture through which projects with contemporary artists, filmmakers, scholars and curators infiltrate the school as provocation to its conventions, practices and pedagogies.

RESEARCH LABORATORIES

A new set of research laboratories has been established at the School to focus resources, creativity, and precision on key issues facing the next generations of experts devoted to the built environment. While new forms of expertise are constantly being developed within the individual programs at the School, these new labs gather some of these emergent trajectories together and focus them on a series of applied research experiments. Each lab constitutes a mini-think tank that takes on a limited set of collaborative partnerships with other units of the University and with colleagues outside the University to carry out projects that could not be done independently of such partnerships. Some of the labs will themselves collaborate when their particular joint expertise is needed. The work of the labs is integrated into the teaching programs within the School. Existing courses, particularly studios and research seminars, will often act as the site for key parts of the experiments, with research assistants drawn from the master's and Ph.D. programs. The labs also organize events (lectures, workshops, or symposia), and produce publications. Considerable emphasis is placed on the research findings but also on the ongoing debates addressed by the research and the new forms of research these debates will provoke. Experimental Labs include the following:

Columbia Laboratory for Architectural Broadcasting

Laboratory for Applied Building Science

Spatial Information Design Lab

Chine Megacities Lab

Urban Landscape Lab

Latin American & Caribbean Laboratory (Latin Lab)

Network Architecture Lab

Living Architecture Lab

Technological Change Lab (TCLAB)

Sustainable Urbanism International

Global Africa Lab

Cloud Lab

Nonlinear Solutions Unit

Community & Capital Action Research Lab (C2arl)

Conservation Lab

Sustainable Living Urban Model (S.L.U.M. Lab)

Architecture Online Lab

Death Lab

Labs

COLUMBIA LABORATORY FOR ARCHITECTURAL BROADCASTING (C-LAB)

Director: Jeffrey Inaba

The mission of CLAB is to test experimental forms of architectural communication. Rethinking architecture at a global scale, the lab sets up creative partnerships to broaden the range and increase the intensity of architectural discourse - launching unique events, provisional networks, special issues of magazines, video streams, television, radio and webcasts. The lab acts as a kind of training camp and energy source for incubating new channels for debate about architecture.

LABORATORY FOR APPLIED BUILDING SCIENCE (LABS)

Director: Phillip Anzalone

Manager: Nathan Carter

The Laboratory for Applied Building Science combines the latest technology and equipment for digital fabrication with traditional tools for wood, metal and plastic. Within the walls of the lab itself, as well as in the classroom and in the laboratory of New York City, GSAPP students continue to challenge the given methodologies of software and hardware in order to apply digital tools to their research, rather than the reverse. The integration of CNC fabrication into parametric modeling, BIM and other organizational hierarchies has challenged working models of fabrication at the scale of the prototype as well as the building, offering a level of complexity and specificity thought to be impossible until recent years.

The invariable ability of students to question both the theoretical implications and practical applications of digital design has been a critical mechanism in keeping the research at the Avery Digital Fabrication Lab not just current – but ahead of its time. Industry has finally seen a shift towards CNC fabrication becoming more widely accepted and implemented, for reasons of both aesthetics and efficiency, while Building Information Modeling has concurrently grown as one of the most widely used instruments of digital design, both in academia and in practice. Within the academic realm, Columbia students have continued to challenge the given methodologies of software in order to apply digital tools to their research, rather than the reverse. The integration of CNC fabrication into parametric modeling, BIM and other organizational hierarchies has challenged working models of fabrication at the scale of the prototype as well as the building, offering a level of complexity and specificity thought to be impossible until recent years.

The shift toward more expansive forms of digital production within the design and construction industry affords opportunities to not only reconfigure the relationships between the key players, but also incorporate industry sectors not typically associated

with building construction. At the core of this shift is the integration of communication through various forms of digital networks, CNC fabrication being just one among many, with the ambition of developing a comprehensive, well organized, easily accessible, and parametrically adaptable body of information that coordinates the process from design through a building's lifecycle. CNC technologies afford the architect an opportunity to strategically reposition design within the fabrication and construction processes; not only have the products of the architect—until recently, only drawings—become highly specific 3-dimensional representations, but because of the hierarchical assignment of parameters, the design itself has remained malleable until fabrication commences.

SPATIAL INFORMATION DESIGN LAB

Director: Laura Kurgan

Founded in 2004, the Spatial Information Design Lab is a think- and action-tank at Columbia University specializing in the visual display of spatial information about contemporary cities and events. The lab works with data about space -- numeric data combined with narratives and images to design compelling visual presentations about our world today. The projects in the lab focus on linking social data with geography to help researchers and advocates communicate information clearly, responsibly, and provocatively. We work with survey and census data, Global Positioning System information, maps, high- and low-resolution satellite imagery, analytic graphics, photographs and drawings, along with narratives and qualitative interpretations, to produce images.

Spatial Information Design is a name for new ways of working with the vast quantity of statistical and other data available about the contemporary city. By reorganizing tabular data using unique visualization techniques, and locating it geographically, we try to correlate disparate items of information and picture the patterns and networks they create. Putting data on a map can open new spaces for action, and new options for intervention, as the often-unseen shapes and forms of life in the city becomes visible.

Design, here, is less like a tool and more like a language, a practice that shapes the outcomes and understandings of the things we do. It is not simply an aesthetic prejudice. The ways in which we present ideas and information can sometimes be even more important than the material itself, for better, or more commonly, for worse. The words and pictures we choose make a difference to the way people, including us, imagine their own possibilities of responding to what we say and do.

The goal of the Spatial Information Design Lab is to make partnerships with people and organizations inside and outside of the University. We are most interested in research which requires the independence and rigor of an academic setting (free of the usual politics and pressures of real life situations), and which thrive in an atmosphere of open inquiry, experimentation, and risk-taking, in order to expand the ways in which data is collected, used, and presented.

CHINA MEGACITIES LAB

Director: Jeffrey Johnson

Over the next 25 years, it is projected that China will account for 50% of the world's new construction. The majority of this construction will occur in existing cities, or newly formed urban areas. It is the mission of the China Megacities Lab to become actively engaged with this rapid urbanization and spatial production occurring in China, through both research and design.

URBAN LANDSCAPE LAB

Directors: Janette Kim & Katherine Orff

The Urban Landscape Lab is an interdisciplinary applied research group at Columbia University in the City of New York. We focus on the role of design in the analysis and transformation of the joint built-natural environment, and study ecological processes and urban systems as hybrid phenomenon through targeted pilot projects, practical strategies, and experiments.

LATIN AMERICAN & CARRIBEAN LABORATORY (LATIN LAB)

Director: Clara Irazábal

The Latin American and Caribbean Laboratory (Latin Lab) serves as an intellectual platform for research, educational, and service initiatives related to architecture and urban planning in Latin America and the Caribbean (LAC). Based at Columbia University's Graduate School of Architecture, Planning and Preservation (GSAPP), the Lab aims to become a leading laboratory for the study of the built environment and community development in LAC and its diasporas and a premier resource to assist in the just and sustainable transformations of LAC territories and communities. The Lab's primary lines of work are Migration and Ethno-Urbanism, Urban Resilience and Upgrading, and Transnational and Regional Planning.

NETWORK ARCHITECTURE LAB

Director: Kazys Varnelis

The Network Architecture Lab is an experimental unit that embraces the studio and the seminar as venues for architectural analysis and speculation, exploring new forms of research through architecture, text, new media design, film production and environment design.

LIVING ARCHITECTURE LAB

Directors: David Benjamin and Soo-In Yang

Political and cultural conditions change: what if the walls and windows morphed in response? Air and water quality fluctuate: what if a cloud of light above the river modulated its color as a public display of contamination? Demands for occupation of space shift across days, seasons, and years: what if traditionally mute and inert building materials appeared and disappeared accordingly?

TECHNOLOGICAL CHANGE LAB (TCLAB)

Director: Smita Srinivas

TCLab is a Columbia university-based research and advisory program established in 2007 and directed by Prof. SMITA SRINIVAS of the Urban Planning program. It is housed at the Graduate School of Architecture, Planning and Preservation (GSAPP).

The intellectual focus of TCLab is in understanding (a) the characteristics of economic and technological change, and especially industrial transformation of countries, cities and regions and (b) the conditions under which considerations of efficiency and equity can evolve alongside.

SUSTAINABLE URBANISM INTERNATIONAL

Director: Jyoti Hosagrahar

Sustainable Urbanism International is a research and design initiative committed to the conservation of cultural heritage, and developing strategies for promoting culturally and environmentally sensitive strategies for urban development. SUI was established as a non-profit NGO in Bangalore in 2003 and is also a research unit at the Graduate School of Architecture, Planning, and Preservation, Columbia University in New York.

SUI works with governments, communities, and private investors to develop strategies for urban development that bring about the benefits of modernization while minimizing the cultural dislocations arising from it.

GLOBAL AFRICA LAB

Directors: Mario Gooden & Mabel Wilson

Political and cultural conditions change: what if the walls and windows Through design methods and research aided by new technologies and media, Global Africa Lab (GAL) explores the spatial topologies of the African continent and its diaspora. GAL's innovative research and pedagogical agenda examines how the unique political histories and the contemporary forces of globalization shape the architecture, urbanism, culture and ecologies of these places.

CLOUD LAB

Directors: Toru Hasegawa & Mark Collins

Clouds have already been utilized to expand the knowledge frontiers of science, medicine, productivity and entertainment. Clouds work through scalability and vast participation. Clouds bring new understanding to old problems and allow us to pose new questions. Clouds are a new way of thinking. Our mission at the Cloud Lab is to expand the knowledge frontier of architecture and the environment by examining the applications of unique computing technologies in our urban life.

We examine the implications for big data, mass adoption and exponential growth for the ways we construct the physical and mental environment. We create and promote applications for design engineering. We promote new methods of interaction and expression within our environment.

NON-LINEAR SOLUTIONS UNIT

Director: Caterina M. Tiazzoldi

In a complex-structured city in which the interactions among parts intensify; in which the number of decision makers and cultural scenarios overlap, interconnect, and sometimes collide; in which the temporal dimensions of the citizens are dissimilar; in which local and global, physical and virtual dimensions co-exist, it is necessary to identify a set of design tools which could respond to design complexity. The Non Linear Solutions Unit focus on the development of a conceptual methodology that respond creatively to the complexity of today's cities: a polyhedral lens to approach multidisciplinary projects.

COMMUNITY & CAPITAL ACTION RESEARCH LAB (C2ARL)

Director: Stacey Sutton

The Community & Capital Action Research Lab (C2ARL) provides an infrastructure for cutting-edge research, critical discourse, and empirically informed practice on fundamental questions related to the incessant tension between the needs of community and the imperatives of capital.

CONSERVATION LAB

Director: George Wheeler

The Conservation Laboratory serves as the primary teaching venue for conservation courses where lectures, demonstrations, and practicums take place. It supports such courses as Structures, Systems and Materials I&II; Architectural Metals; American Architectural Finishes; Concrete, Cast Stone & Mortar; Stone, Brick & Terracotta; Conservation Workshop; and is the fundamental locus for Basic Conservation Science and Laboratory course. Thesis research is also conducted in the laboratory.

SUSTAINABLE LIVING URBAN MODEL (S.L.U.M. LAB)

S.L.U.M. Lab is a global nomadic enterprise bringing together students, planners, and

Architectural Finishes; Concrete, Cast Stone & Mortar; Stone, Brick & Terracotta; Conservation Workshop; and is the fundamental locus for Basic Conservation Science and Laboratory course. Thesis research is also conducted in the laboratory.

SUSTAINABLE LIVING URBAN MODEL (S.L.U.M. LAB)

S.L.U.M. Lab is a global nomadic enterprise bringing together students, planners, and architects worldwide to work towards an understanding of the links between architecture, urban design, urban planning, and poverty alleviation.

Working from the pedagogical context of Columbia University's Graduate School of Architecture, Planning, and Preservation, the Lab challenges prevailing notions about urban improvement, searching for innovative methods to optimize the energy of the vernacular and the informal. It works to expand the role of the politically engaged architect and planner, while also breaking down rigid definitions and valuations of urban typologies.

ARCHITECTURE ONLINE LAB

Directors: Troy Conrad Therrien and Leigha Dennis

Which online tools and protocols will become constituent parts of architecture research, design and pedagogy? How can architects utilize digital tools to reinvent methods for representation and communication? What can architecture learn from non-traditional disciplinary collaborations? How can architecture offer offline solutions to an over-connected world? What does interactivity mean for the nature, use and translation of space? The Architecture Online Lab is an experimental practice which aims to develop the inquiries, tools, protocols, and frameworks of thought and action to be consumed, advanced and critiqued as we continue to question and define architecture online. Our approach is both discursive and practical, operating in and on new and traditional forms and media, and by creating our own through working prototypes.

DEATH LAB

Directors: Karla Maria Rothstein

Based at Columbia University GSAPP, the DeathLab is a trans-disciplinary research and design space focused on reconceiving how we live with death in the metropolis. DeathLab makes it possible for dynamic minds to come together to engage the complex challenges of our individual and collective mortality. We are changing how people think about death. At the core of DeathLab is a team of leading researchers, scholars, experts, and designers from fields that enable us to engage both intimate and infrastructural urban concerns. Our ambition is to develop design strategies that can be prototyped, built, and experienced by the public. We are dedicated to plausible possibility.

RESOURCES

FACILITIES & RESOURCES

For more than two decades, the school has embarked on an ambitious campaign to incorporate state-of-the-art digital technologies in the design curriculum. Since the introduction of the first “paperless” design studios on the seventh floor of Avery in the mid-nineties, there has been substantial annual investment and dramatic improvements in the facilities and electronic infrastructure for research, teaching, presentation, computer-aided design, fabrication, and general computing at the GSAPP. Meanwhile, the general computing resources provided by the University have been upgraded as well and include a variety of online services as well as a campus-wide wireless network.

The GSAPP’s groundbreaking “paperless” studio model has evolved as new digital-design environments have been installed, evaluated, and modified in 500, 600 and 700 Avery. Since Fall 2002, all students in Avery have immediate access to high-end computing at their individual desks, which also provide space for drafting and model making. There are also computer lab areas within the Historic Preservation and Urban Planning studios as well as a computer classroom in Fayerweather.

A centralized technical and administrative structure has been set up to allow the School to provide a higher level of technical support, standardization of computer hardware and software, and more generous computing resources for all GSAPP students. The result is a very wide selection of professional software packages ranging from CAD and GIS to multimedia and video editing, all available at all times from any one of well over 300 workstations in the School, plus vast central data-storage capacity that is measured in terabytes.

The School’s Audio/Visual Department lends digital projectors, digital-still and video cameras, and laptop computers for student reviews, classes, and special events. The AV team also maintains a growing number of “electronic theater” and digital classroom spaces that are network connected and equipped with PCs and ceiling-mounted projectors. The School has a Digital Output Facility with a variety of large-format color plotters, color laser printers, and 3D output devices.

The Visual Studies Sequence has grown to over thirty specialized seminars besides the basic Architecture, Drawing, and Representation I course that is required for Master of Architecture students. These seminar topics range from Computer Numerically Controlled (CNC) milling to Multimedia authoring, from Algorithmic architecture and Scripting (programming) to Digital filmmaking (video production and post-production). The School has expanded its geographic information systems (GIS) initiative with dedicated staff, additional equipment, new GIS seminars, and the acquisition of new GIS software and demographic data sets that are available for analysis by Architecture, Planning, and Urban Design students.

The School's Web archive and online publishing initiative has been accelerated with the creation of the director of electronic publishing position and the expansion of Web-server resources. This has made possible the on-line Newsline review as well as larger Web space allocations for all students, studios, courses, seminars, and special projects.

PUBLICATIONS

Director: James Grahme

The School maintains a series of publications to foster the exchange of information and ideas between it and the architecture, planning, preservation, and real estate development communities. Newsline is an on-line publication that contains information and essays regarding the School's programs, faculty, and alumni as well as calendars and reviews of New York area events. It acts as a platform for current debates in architecture and urban issues. It is available at <http://newsline.arch.columbia.edu/>. Abstract is the yearly journal that documents the School's programs and student work and offers students the opportunity to have their work published for wide distribution. Abstract is distributed to students and is available for purchase in bookstores. D (Documents) is a documentation of events, lectures, and symposia at the School. It is published twice a year. Studio Work covers work and research produced in selected studios in the School. In addition, the School publishes catalogs of exhibitions it organizes as well as a series of books titled Columbia Books of Architecture (CBA), covering a variety of issues of the built environment, theory, and history.

LECTURES & EVENTS

Director: Gavin Browning

The School offers an array of lectures, conferences, debates and events that reflect the diversity and interests of its programs. The Wednesday Evening Lecture Series brings internationally prominent practitioners, historians, and theorists to speak on issues of architecture, planning, development, and urbanism. In addition, the Architecture, Planning, Preservation, and Real Estate Programs maintain their own special lecture series that are open to the School community.

In addition, the School and its programs sponsor special symposia, debates and conferences that draw together faculty, prominent guests, and students to discuss issues of timely and historical importance.

EXHIBITIONS

Director: Mark Wasiuta

The core of the GSAPP Exhibitions program is the Arthur Ross Architecture Gallery. The gallery is simultaneously a testing ground for exploring new approaches to architectural exhibitions, and a reflexive space for considering and analyzing architecture as it has been formed through exhibition. Different strains of exhibition experiments appear in

the gallery, sometimes through the coordination and exposure of archival, historical or thematic architectural research projects, or through installation and curatorial strategies themselves. One of the more porous spaces within the school, an organism within an ecology of disciplinary exchanges, the gallery is a site for staging exhibitions that leave the school to travel to other institutions and to museums elsewhere, and is also an aperture through which projects with contemporary artists, filmmakers, scholars and curators infiltrate the school as provocation to its conventions, practices and pedagogies.

NEW YORK CITY

The City of New York is in itself a principal resource for the student, who benefits from its urbanism and endless variety of excellent examples of historic and modern buildings.

New York's institutions are another significant advantage. Alumni and faculty members of the School are in positions of major responsibility in various organizations. This has helped the School to open up unique opportunities for students. A partial list of these organizations includes the Museum of Modern Art (Department of Architecture and Design), the Metropolitan Museum of Art, the Cooper-Hewitt Museum, the South Street Seaport Museum, the Architectural League of New York, the Institute for Fine Arts (New York University), the New York City Planning Commission, the New York City Landmarks Preservation Commission, the Parks Council, and the Municipal Art Society.

WILLIAM F. KINNE FELLOWS TRAVELING FELLOWSHIPS

The School is the beneficiary of a considerable bequest in honor of William F. Kinne Fellows that has as its purpose the enrichment of the student's education through travel. A number of fellowships for the study of architecture and related fields are awarded annually to graduating students. Applications from members of the graduating class are considered for postgraduate travel and for travel during the summer preceding the final year of study. Specific requirements and guidelines are announced during the academic year. Students apply in the spring term of each year.

THE PAUL MILSTEIN PROFESSORSHIP OF URBAN DEVELOPMENT

In 1983 Mr. and Mrs. Seymour Milstein endowed the Graduate School of Architecture, Planning and Preservation with a professorship named in honor of their brother Paul Milstein. The Paul Milstein Professorship of Urban Development provides the opportunity to focus in depth on issues of interest by inviting senior professionals or scholars to teach for one or two terms each year in the Master of Science in Real Estate Development Program. It is the intention of the professorship to encourage a deepening interest in the forces that have and will shape urban development in America.

MATHEWS LECTURE SERIES

The Mathews Lectures began in 1935 with an endowment from Charles T. Mathews (Class of 1889).

PROGRAMS & DEGREES

FIRST PROFESSIONAL, POST-PROFESSIONAL & NON-DEGREE

FIRST PROFESSIONAL DEGREES

Master of Architecture

Master of Science in Urban Planning

Master of Science in Historic Preservation

Master of Science in Critical, Curatorial and Conceptual Practices in Architecture

Master of Science in Real Estate Development

POST-PROFESSIONAL DEGREES

Master of Science in Advanced Architectural Design

Master of Science in Advanced Architectural Design - Cities + Architecture Program

Master of Science in Architecture and Urban Design

DOCTORAL DEGREES

The Ph.D. in Architecture

The Ph.D. in Urban Planning

NON-DEGREE PROGRAMS

The Shape of Two Cities: New York/Paris Certificate Program

Introduction to Architecture

DUAL DEGREE PROGRAMS WITHIN THE GSAPP

Master of Architecture & Master of Science in Historic Preservation

Master of Architecture & Master of Science in Urban Planning

Master of Architecture & Master of Science in Critical, Curatorial & Conceptual Practices in Architecture

Master of Science in Urban Planning & Master of Science in Historic Preservation

JOINT DEGREE PROGRAMS WITHIN THE GSAPP

Master of Architecture & Master of Science in Real Estate Development

Master of Science in Urban Planning & Master of Science in Real Estate Development

Master of Science in Historic Preservation & Master of Science in Real Estate Development

DUAL DEGREE PROGRAMS WITH OTHER SCHOOLS AT COLUMBIAP

Master of Science in Urban Planning & Master of Business Administration (in conjunction with the Columbia Business School)

Master of Science in Urban Planning & Master of International Affairs (in conjunction with the School of International and Public Affairs)

Master of Science in Urban Planning & Juris Doctor (in conjunction with the School of Law)

Master of Science in Urban Planning & Master of Public Health (in conjunction with the Mailman School of Public Health)

Master of Science in Urban Planning & Master of Science in Social Work (in conjunction with the School of Social Work)

MASTER OF ARCHITECTURE (M.ARCH)

CORE STUDIOS DIRECTOR: Michael Bell

ADVANCED STUDIOS DIRECTOR: Laurie Hawkinson

The Master of Architecture Program is a three-year first professional degree program that examines the importance of architectural design concepts in relation to historic and contemporary issues in an evolving culture.

Being part of a great university located in a major metropolis has determined much of what is unique about the Architecture Program. The School is not only able to attract excellent faculty members, but it is also able to draw upon the large and diverse community of architects, theorists, practitioners, and scholars in New York. Thus the program is able to expose student architects to architecture as a complex and pluralistic cultural endeavor.

At the same time that it explores the richness of architecture culture, the program seeks to provide an orderly system for integrating the various aspects of architectural study. Therefore, the curriculum is broadly divided into the study of history and theory, technology, visual studies and methods, and design. Learning about architecture involves, on the one hand, examining those historical, social, cultural, technical, and economic forces that shape buildings; on the other hand, it means mastering these forces with means traditionally available to the architect and the latest experimental concepts and techniques. The design studio is the main focus of the curriculum in that it offers the opportunity to integrate and synthesize what is being studied. In general, the program seeks to impart basic principles and knowledge, to develop visual and analytical skills, and to relate creativity to given cultural situations. It is hoped that architects, thus trained, will be able to use their knowledge and insight by responding to and improving the built environment.

ADMISSIONS

Eligibility

The M.Arch. at Columbia is the first professional degree in architecture; therefore, students who already hold a professional degree (such as the five-year B.Arch. degree) are not eligible to apply to the program. Students who have studied architecture in nonprofessional programs (such as a four-year program in architecture) may apply, with the possibility of obtaining advanced standing for some course work. Prior architectural study is not a requirement. Regardless of prior experience, all students fill out the same application forms and send supporting materials (as described below). Applications and all supporting materials are due on December 15th. Students are admitted to the M.Arch. Program for the fall term only.

Academic Preparation

1. All applicants must have, at the time of first registration, an undergraduate degree from an accredited college or university. Applicants are required to take the Aptitude Test of the Graduate Record Examination. Information may be obtained from the Graduate Record Examination, Educational Testing Service, Box 955, Princeton, NJ 08540 (Web site: www.gre.org/atglance.html).
2. Applicants who have no prior background in architecture must complete a course in architectural graphic presentation as a prerequisite for the Core Studio Sequence, before first registering in the M.Arch. Program.
3. To fulfill the prerequisite for the History/Theory Course Sequence, all applicants must have completed a 3-point survey course in architectural history dealing with any of the following periods: classical to Renaissance, Renaissance to modern, or modern.
4. To fulfill the prerequisites for the Building Technologies Course Sequence, all applicants must have completed a 3-point course in general physics or two 3-point calculus courses.

Applicants are required to complete the following course work: one term of studio in the visual arts (drawing, painting, or sculpture). In addition, a reading knowledge of a modern foreign language and a survey course in architectural history are required.

PORTFOLIO

In addition to the application form and supporting documents, applicants must submit a portfolio showing evidence of their visual acuity and graphic abilities: paintings, drawings, prints, graphic designs, or architectural drawings. It should contain at least ten to twelve items and it is recommended that evidence of freehand drawing skills be included. Submitted materials, either original work or reproductions of the originals, should not exceed 8.5 by 11 inches and should not measure more than 0.5 inch in thickness. Portfolios exceeding these specifications will be returned before the reviewing period. The pages should not be placed in a ring binder, and each page must be clearly marked with the applicant's name. Please do not send slides or CDs.

After May 15th portfolios will be returned by mail only if sufficient postage is included and the return address clearly indicated.

PLACEMENT INTO STUDIO SEQUENCE

Students who are admitted into the M.Arch. Program are informed in their letters of admission of the level at which they will enter the Core Studio Sequence. Based on the evidence submitted in the portfolio, the student's status in relation to the prerequisites and requirements of the studio sequence is determined. Placement into a more

advanced studio is not done by application or petition, but is determined by a faculty committee during the admissions process. A limited number of students may receive advanced standing points for Architecture A4001 and A4002- Core studio, I and II, thereby reducing the required studio sequence to two years. After the student's status has been determined by the M.Arch. Committee on Admission, it is not subject to further review by the Graduate School of Architecture, Planning, and Preservation. No subsequent petitions for advanced standing in design studio courses are considered. Students who are placed into advanced studios should consult with the admissions office about their curriculum.

Transferring Academic Credit

Students who have completed acceptable architecture course work prior to entering the M.Arch. Program may apply for advanced standing credit or course waivers in nonstudio courses. No requests for advanced standing credit are considered until official copies of relevant transcripts have been submitted to the Office of Architecture Admissions.

There are two situations in which one may receive advanced standing in the M.Arch. Program: (1) a student who is admitted into the second year of the M.Arch. Program may receive advanced standing for the first-year courses including the two design studios (potentially 36 points); (2) a student admitted into the first year with an undergraduate degree in architecture may receive credit for some courses; credit will be evaluated on an individual basis (maximum 9 points). Information regarding the procedure for students who wish to petition for advanced standing or course waiver is available at the time of first registration in September. Students may receive the approvals from faculty or directors at any time after enrollment. Official transfer of credit by the Columbia University Registrar, however, cannot be entered on the transcript until one year of full-time enrollment in the M.Arch. Program has been completed. Advanced standing forms are available in the Office of the Dean of Admissions and should be returned there for review.

Petitions for advanced standing credit in nonstudio courses are normally reviewed by a faculty member teaching the equivalent course within the Graduate School of Architecture, Planning, and Preservation. Advanced standing credit is awarded only for courses in which students have received a grade of B or better. In some cases, faculty members may ask to see examples of previous course work. Students are advised to have course descriptions and previous course work on hand at September registration to facilitate planning an academic program with an adviser.

Required documentation for advanced placement normally includes official course transcripts, catalog course descriptions, and at least one of the following: a course syllabus, complete course notes, or a complete set of tests, homework, and course-project documentation.

There are three circumstances under which courses can be waived: (1) the student presents evidence of professional experience in related subject matter; (2) the student passes a formal examination on the subject (with the approval of the course instructor); or (3) the student presents evidence of having passed relevant courses at the undergraduate or graduate level. Because waivers do not carry point or course credit, elective courses must be taken to fulfill the point requirements for the M.Arch. degree. (Students waived from Structures, II; Enclosures and environments, II; Building systems, I; or Building systems, II must take a Building Technologies elective for each course waived.)

THE THREE-YEAR M.A.RCH. CURRICULUM

The Master of Architecture Program attempts to distinguish itself from similar programs elsewhere by stressing the importance of developing an understanding of, and an ability to apply, architectural concepts in relation to broader historic and contemporary issues. The objective of the program is to assist the student in developing a theoretical basis for decision making in design, while maintaining intense exposure to a broad spectrum of philosophical, technological, and cultural attitudes. The faculty believes that a variety of pedagogical approaches delivered with clearly defined objectives best suits the needs of the heterogeneous graduate student population.

The program comprises four major components, together forming the educational matrix that is the core of the Columbia experience:

1. An energetic international student body committed to the profession of architecture and with diverse backgrounds in many areas of intellectual endeavor, all contributing to the richness of the program.
2. A faculty of experienced teachers, both practitioners and researchers, all of whom are expected to relate their extracurricular work to their teaching responsibilities.
3. A program of study consisting of lectures, seminars, and studios, whose objectives are definable but whose form is malleable in response to changing cultural attitudes and social needs.
4. A setting of the most effective physical facilities, including classrooms, studios, auditoriums, shops, and libraries. In addition, the cultural milieu of New York City is an ever-present advantage that gives the program its unique qualities.

The focus of the entire program is the Architecture Design Studio. It is a carefully structured three-year course of study that prepares the student for roles related to the design of buildings and other environmental artifacts. This design activity is

augmented by five other areas of study. The History/Theory Sequence broadens the student's perceptions of his or her design activity, through the historical and theoretical examination of the cultural role of design activity. The Building Technologies Sequence prepares the student to understand the structural, constructional, and material consequences and constraints on design decisions. The Visual Studies Sequence provides specialized investigation that complements the normal studio work, including both manual and computer-aided drawing courses. The Methods/Practice Sequence prepares the student to undertake management and professional practice activities. The Elective Sequence, which permits the student to pursue individual interests in architectural and environmental topics, may become, in certain cases, the basis for pursuing advanced study in specialized areas beyond the M.Arch. degree.

SUMMARY OF THE MASTER OF ARCHITECTURE PROGRAM

To graduate with a Master of Architecture degree, a student is required to complete 108 graduate-level course points that are approved by the Graduate School of Architecture, Planning, and Preservation. These course points are a combination of required courses, a certain number of points of distribution course requirements, and elective course points. The courses are divided into the following categories: Studio, History/Theory, Building Technologies, Visual Studies, Methods/Practice, and Elective. Each category (except Elective) has requirements that must be fulfilled. The School reserves the right to institute changes in the curriculum before the expiration date of this bulletin.

I. Studio Course Sequence

The Studio Sequence is the focus of the M.Arch. Program. During the three-year, six-term program each student may study with as many as six different critics. All studio work is subject to formal public design review, and design juries include visiting architects, historians, artists, critics, and engineers, as well as faculty members from the Architecture, Building Design, Urban Design, Planning, Historic Preservation, and Real Estate Development Programs of the School.

The Core Studios are composed of a carefully structured three-term sequence involving a series of interrelated projects that begins with an examination and utilization of fundamental space-making elements that are directed toward the ordering of hierarchical spatial sequences, the engagement of the phenomena involved in the act of making or constructing, and the occupation of space. Studio projects involve the issues of public and private, urban and suburban, context and program, analysis and invention, among others, and progressively increase in length from two weeks to twelve weeks, with the core skills being gradually supplemented by an increasing amount of experimentation each semester. In the first semester, the students are assigned a teacher and all work on the same design project with many

joint sessions with all the teachers and students. In the second semester, all students work on the same design project, but choose from a range of teachers with very different philosophies, and each student is expected to add a unique programmatic element to the shared program. In the third semester, all students work on a social housing project, selecting their teacher and working in pairs.

In the Advanced Studios, themes, programs, and philosophies are defined by the individual critics. These themes and programs both carry an educational objective and present an opportunity for the critic to develop with his or her students a specific area of work or research. The Advanced Studios are intended to build upon the ideas and skills developed in the Core Studios. The range of faculty and studio projects in studio sections allows the student to work with those instructors on projects that will allow specialized design study. The fourth semester completes the transition from the core to the advanced experimental approach. All teachers present the design problem of different institution, interpreted very broadly. In the fifth and sixth semesters, there are no constraints on the theme or approach and all the studios are open to both M.Arch. students and second professional degree students. While the core is stable, the array of advanced studio options is constantly adjusted as new issues, techniques, and strategies emerge. A number of the studios are joint studios with Urban Planning, Historic Preservation, Real Estate Development, and Engineering students.

STUDIO REQUIREMENT FOR M.ARCH PROGRAM

A4001	CORE STUDIO I	9 pts
A4002	CORE STUDIO II	9 pts
A4003	CORE STUDIO III	9 pts
A4004	ADVANCED STUDIO IV	9 pts
A4005	ADVANCED STUDIO V	9 pts
A4006	ADVANCED STUDIO VI	9 pts
TOTAL		54 pts

II. History / Theory Course Sequence

The History/Theory curriculum stresses a broad social and cultural approach to architecture history. Architecture history is not seen primarily as stylistic evolution, but rather in terms of a rich matrix of parameters-political, economic, artistic, technological,

and theoretical—that have had a role in shaping the discipline. Most instructors of architecture history at GSAPP have both professional and academic degrees. A shared intention is to understand the relations between practice and a historical perspective.

The course offerings are structured to provide each student with an opportunity to gain both a broad general background in architecture history and a degree of specialized knowledge in areas of his or her selection. The architecture history classes within the School are supplemented by classes in the Department of Art History and Archaeology, and students are especially encouraged to take art history courses examining pre-1750 and non-Western topics. Students may also take courses in other departments of the University, such as history and philosophy, providing they meet basic distribution requirements.

Prerequisite for Entry into M.Arch. Program: Any 3-point survey course in the history of architecture. A broad survey of world architecture is especially recommended.

Requirements for M.Arch. Program: Two 3-point courses.

A4348	HISTORY OF ARCHITECTURE I: 1700 - 1850	3 pts
A4349	HISTORY OF ARCHITECTURE II: 1850 - 1945	3 pts

If a student has taken a similar class or classes, he or she may petition the professor of the class to waive the requirement.

Distributional Requirements for M.Arch. Program: The four courses must be chosen from five categories: (1) Pre-1750, Non-Western, (2) Modern: 1750 to the Present, (3) Urban Society, (4) American, and (5) Non-Western. Students are expected to combine breadth in those fields they have not previously studied with in-depth seminars in at least one of these categories. At least one of the distribution areas must be Pre-1750, Western, and one in Non-Western architecture, unless waivers are granted. Each term's course schedule will identify those courses fulfilling the distribution requirements. History/Theory courses are listed on pages 29-36. Other courses may be found in the Art History Department's course listings.

III. Building Technologies Course Sequence

The Building Technologies curriculum is based on the belief that architects benefit by using a basic knowledge of technical systems to help generate a building's spaces, forms, and expression. Accordingly, the curriculum develops an understanding of contemporary technical-utilitarian systems and explores their resolution in relation to programmatic development and spatial design.

The six-course, required sequence begins by outlining the environmental conditions

that habitable spaces respond to and by describing the physical characteristics of building components. Next, individual building systems—including (primarily) structure, building enclosure, environmental conditioning, and information management—are described in depth. For each system studied, various design strategies, materials, fabrication techniques, and didactic built works are explored. Field trips, laboratory demonstrations, and short design problems augment class study. As both qualitative and basic quantitative concepts are mastered, the curriculum shifts its focus to increasingly complex systems serving entire buildings. The sequence's last two courses (Architectural Technology IV, V) concentrate on how these systems are detailed, interact with each other, and inform a building's spaces and formal expression—first through in-depth case studies of entire buildings, and then by the preliminary design of an industrial-loft block. In both courses, students work in teams with structural, mechanical, and building-envelope experts.

Throughout the required sequence, students are encouraged to apply their growing technological knowledge to design problems posed in studio. Occasionally, studios focusing on various relationships between technology, utility, program, and form are offered for third-year students.

Prerequisite for Entry into M.Arch. Program: Any 3-point course in general physics or two 3-point courses in calculus.

Requirements for M.Arch. Program: Six 3-point courses.

A4111	ARCHITECTURAL TECHNOLOGY I	3 pts
A4123	ARCHITECTURAL TECHNOLOGY II	3 pts
A4220	ARCHITECTURAL TECHNOLOGY III	3 pts
A4221	ARCHITECTURAL TECHNOLOGY IV	3 pts
A4125	ARCHITECTURAL TECHNOLOGY V	3 pts
A4XXX	ARCHITECTURAL TECHNOLOGY VI	3 pts
TOTAL		18 pts

Electives for M.Arch. Program: Advanced electives supplement the required curriculum and provide the basis of study for those students entering the school with a strong technical background. The electives focus on recent technological developments and their impact on design, and the historical relationships between technology, philosophy, politics, and architecture. These courses take advantage of New York's professional practitioners working with the technological "state of the art."

The diverse views of architectural technology held by both the School's design and technology instructors are reflected in, and thereby strengthen, the elective offerings.

Electives are open to all students in the School, subject to the prerequisites listed in the course descriptions. Students waived out of Structures, II; Enclosures and environments, II; Building systems, I; or Building systems, II, must take a course from the following list for each waived course. Some courses are not offered every year. Additional technology electives are taught occasionally.

BUILDING TECHNOLOGY ELECTIVES FOR M.ARCH PROGRAM

A4118	EXALTED STRUCTURE	3 pts
A4684	SUSTAINABLE DESIGN	3 pts
A4707	DIGITAL DETAILING: SIMULATION & ANALYSIS	3 pts
A4776	INFRASTRUCTURE: MAN, MACHINE & AUG. OF EARTH	3 pts
A4781	SURFACE, SCREEN & STRUCTURE	3 pts
A4783	WORKFLOW: DESIGNING INDUSTRY	3 pts
A4788	MODULAR ARCHITECTURE	3 pts
A4378	LIVING ARCHITECTURE I & II	3 pts

IV. Visual Studies Workshops

The Visual Studies Sequence is intended to develop and improve the student's capacity for graphic representation of three-dimensional architectural form and space. It is intended as a corollary to Architecture A4001 and A4002-Core studio, I and II, and involves the presentation and utilization of increasingly sophisticated and precise drawing techniques, both drafted and freehand.

Requirements for M.Arch. Program: One 3-point course and 3 points of electives are required in the Visual Studies sequence.

A4509	ARCHITECTURAL DRAWING & REPRESENTATION II	3 pts
A4511	VISUAL STUDIES ELECTIVE	3 pts

VISUAL STUDIES ELECTIVES FOR M.ARCH PROGRAM

A4524	TOPOLOGICAL STUDY OF FORM	1.5 pts
A4525	SIMULATION ORIGIN OF TANGIBLE FORM	1.5 pts
A4534	TECHNIQUES OF THE ULTRAREAL	1.5 pts
A4542	IMAGINING THE ULTRAREAL	1.5 pts
A4676	ARCHITECTURAL PHOTOGRAPHY I	1.5 pts
A4612	ARCHITECTURAL PHOTOGRAPHY II	1.5 ptss
A4711	SEARCH: ADVANCED ALGORITHM	1.5 pts
A4715	RE-THINKING BIM	1.5 pts
A4716	GRAPHIC PRESENTATION I	3 pts
A4717	GRAPHIC PRESENTATION II	3 pts
A4718	CINEMATIC COMMUNICATION	1.5 pts
A4726	OTHER DESIGN SEMINAR	1.5 pts
A4730	ADAPTATIVE FORMULATIONS 01	1.5 pts
A4731	ADAPTATIVE FORMULATIONS 02	1.5 pts
A4741	FIELD OF PLAY: AGENCY IN MAPPING SITE	1.5 pts
A4747	PARAMETRIC REALIZATIONS	1.5 pts
A4748	SPECIAL TOPICS IN FABRICATION : FIELD FABRICATIONS	1.5 pts
A4753	SPECIAL TOPICS IN FABRICATION : DESIGN MACHINE	1.5 pts
A4786	BIOMATERIALS : SUSTAINABLE FABRICATION AND LIVING FORMS	1.5 pts
A4794	BODY CRAFT	1.5 pts

A4798	CRAFT IN THE DIGITAL AGE	1.5 pts
A4801	ENCODED MATTER	3 pts
A4813	INTEGRATED PROJECT DELIVERY	1.5 pts
A4814	HACKING THE URBAN EXPERIENCE	1.5 pts
A4815	X INFORMATION MODELING	1.5 pts
A4819	SITE TO SITE : SITE TO WEB	1.5 pts
A4822	SITE TO SITE : WEB TO SITE	1.5 pts
A4823	INTELLIGENT SYSTEMS / INTERACTIVE ARCHITECTURES	1.5 pts
A4829	XIM : PARAMETRIC MASSING + OPTIMIZATION	1.5 pts
A4832	LINES NOT SPINES: DRAWING AS INVENTION	1.5 pts
A4836	DATAMINING THE CITY I	1.5 pts
A4836	DATAMINING THE CITY II	1.5 pts

V. Methods / Practice Course Sequence

The Methods/Practice Sequence introduces the student to various aspects of professional practice including computer-aided design, project and office management, developmental processes, legal and planning regulation, etc. These serve as an introduction to areas to be further developed during the three-year apprenticeship period (following completion of the M.Arch Program) required for professional licensing.

Requirements for M.Arch. Program: Two 3-point courses are required.

A4509	ARCHITECTURAL DRAWING & REPRESENTATION I	3 pts
A4511	PROFESSIONAL PRACTICE	3 pts

VI. Electives

In addition to those courses listed above in categories II-V, any of which may be taken as an elective, courses offered by the Urban Planning and Historic Preservation Programs when taken as electives may be applied toward completion of the M.Arch. degree.

Electives in Other Schools and Departments : Students may choose courses from other schools and departments of the University for M.Arch. elective credit. These courses should be directly related to the student's professional program within the School, and these courses must be at the graduate level (course numbers 4000 and above). Exceptions may be granted only by the associate dean. Approval for these courses must be obtained during the registration period for the semester during which they are to be taken and provided to the Office of Admissions.

VII. Summer Courses

M.Arch. degree candidates must be matriculated in the program for at least two years (72 points). A maximum of two research courses may be taken toward the M.Arch. degree. A total of 108 points are required for the M.Arch. degree.

EXAMPLE OF THREE-YEAR M.ARCH CURRICULUM

TERM 1 (FALL)

A4001	CORE STUDIO I	9 pts
A4111	ARCHITECTURAL TECHNOLOGY I	3 pts
A4348	HISTORY OF ARCHITECTURE I: 1750 - 1850	3 pts
A4221	ARCHITECTURAL DRAWING & REPRESENTATION I	3 pts
TOTAL		18 pts

TERM 2 (SPRING)

A4002	CORE STUDIO II	9 pts
A4123	ARCHITECTURAL TECHNOLOGY II	3 pts
A4348	HISTORY OF ARCHITECTURE II: 1850 - 1945	3 pts

A4221	ARCHITECTURAL DRAWING & REPRESENTATION II	3 pts
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TOTAL 18 pts

TERM 3 (FALL)

A4003	CORE STUDIO III	9 pts
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A4123	ARCHITECTURAL TECHNOLOGY III	3 pts
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A4348	ARCHITECTURAL TECHNOLOGY IV	3 pts
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AXXXX	HISTORY / THEORY DISTRIBUTION - MODERN	3 pts
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TOTAL 18 pts

TERM 4 (SPRING)

A4004	ADVANCED STUDIO IV	9 pts
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A4123	ARCHITECTURAL TECHNOLOGY V	3 pts
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AXXX	HISTORY / THEORY DISTRIBUTION - NON-WESTERN	3 pts
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AXXX	VISUAL STUDIES ELECTIVES (2 courses at 1.5 pts/each)	3 pts
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TOTAL 18 pts

TERM 5 (FALL)

A4005	ADVANCED STUDIO V	9 pts
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A4123	ARCHITECTURAL TECHNOLOGY VI	3 pts
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A4XXX	HISTORY / THEORY DISTRIBUTION - PRE-1750	3 pts
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A4221	PROFESSIONAL PRACTICE	3 pts
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TOTAL 18 pts

TERM 6 (SPRING)

A4006	ADVANCED STUDIO VI	9 pts
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A4XXX	HISTORY / THEORY DISTRIBUTION - URBAN	3 pts
A4221	ARCHITECTURAL DRAWING & REPRESENTATION II	3 pts
A4XXX	ELECTIVE	3 pts

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 Association Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes two types of degree: the Bachelor of Architecture and the Master of Architecture. A program may be granted a six-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established education standards.

Master's degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

COURSES OF INSTRUCTION

A4001 Solomonoff	Core Architecture Studio I	9 pts
A4002 Andraos	Core Architecture Studio II	9 pts
A4003 Sample	Core Architecture Studio III	9 pts
A4004 Marble	Advanced Architecture Studio IV	9 pts
A4005 Hawkinson	Advanced Studio V	9 pts
A4006 Wilson	Advanced Studio VI	9 pts

HISTORY/THEORY

A4326	Architectural Visualization since 1900	3 pts
Martin		

As a rule, architects do not build. They draw, write, annotate, diagram, model, map, sketch, photograph, animate, and otherwise visualize objects, spaces, territories, and processes; they make visual and verbal presentations; they compile visual and written analyses and reports; and they issue visual and written instructions. This lecture course surveys these activities across the twentieth century through selected episodes in the history of architectural visualization in a variety of geographic and cultural contexts.

A4330	Urban History	3 pts
Sherer		

Urban morphology and city life in Western cities from antiquity through the capital cities of mid-18th-century Europe, showing connecting trends in architecture and urban form; the discourse on cities, civic culture and civic ritual; public and private space; the role of the architect and urban planner; cultural and formal complexity; and adaptation to change.

A4332	European Urbanism + Cartography in the	3 pts
Sanger	16th - 18th Century	

This course takes cartography as a point of departure for understanding the design of some major European cities in the Early Modern Period (16th- 18th centuries). It examines how maps document and influence their built environment. It gives students the tools to see how they function as carriers of deeper scientific, political and rhetorical meanings. The class will focus on a few major European cities and students will work with original maps in New York Collections.

A4337	Politics of Space: Cities, Institutions, Events	3 pts
McLeod		

Seminar explores the relations between space, power, and politics in the urban environment from the Enlightenment period to the present. General theoretical introduction (Henri Lefebvre and Michel Foucault), the urban environment (institutions, public/private dichotomies, urban monuments, events) and the relation between space and power in actual situations.

A4344	Traditional Japanese Architecture	3 pts
Kudo		

Japan is as a society dramatically changing, dynamically evolving, since 311 in 2011. It is no more a country of stainless purity of self discipline as described by Ruth Benedict in her legend The Chrysanthemum and The Sword. No excuse was allowed in any failure before , but now all are excused with self-justification and aggressive self-assertion. Is the apparent change a paradigm shift or adding another disguising layer to respond to new global world?

A4348	Architecture History I	3 pts
Mcleod		

Developments in architectural history during the modern period. Emphasis on moments of significant change in architecture (theoretical, economic, technological, and institutional).

A4349	History of Architecture II	3 pts
Frampton		

The course traces the history of modern architecture and its transformation under the influence of two major forces: the process of modernization and the development of ideology. The first of these derives from the material changes brought about by technology and industrialization; the second stems from the received idea of progress and from the utopian legacy of the Enlightenment. The period covered runs from the high point of the Art Nouveau to the death of Le Corbusier.

A4356	Contemporary Chinese City	3 pts
Johnson		

A4363	The Predicament of Modernity: Politics,	3 pts
Frampton	Philosophy and Architecture, 1848-1988	

This course is based on a sequence of technological, ideological, cultural, and political transformations that took place under the sign of modernity and modernization between 1848 and 1988. The first two meetings consist of introductory lectures given by the instructor (sessions 1-3), followed by student presentations developed under the supervision of the instructor.

A4374	Contemporary Theory and Criticism of	3 pts
McLeod	Architecture, 1960-Present Structuralism/Poststructuralism	

Seminar on issues in architecture theory and criticism that have emerged in the past two decades. Topics include semiology, postmodernism, rationalism, typology, and Marxist cultural theory.

A4429	Studies in Tectonic Culture	3 pts
Frampton		

A4460	Japanese Urbanism	3 pts
Breslin		

Using an interdisciplinary approach, this seminar will explore Japanese urbanism and Tokyo. Urban theories, history, geography, fictions, films, sociology and anthropology along with cultural critiques will help situate the more personal experiences of the metropolis and the new “global city.” In considering the formation of urban/geographical entities, its infrastructure and underlying ideologies, we will also attempt to uncover the mechanisms of the development of collective identities and individual reconciliations.

A4461	Traditional Chinese Architecture	3 pts
Chang		

A4469	The History of Architecture Theory	3 pts
Wigley		

Architecture emerges out of passionate and unending debate. Every design involves theory. Indeed, architects talk as much as they draw. This class will explore the way that theory is produced and deployed at every level of architectural discourse from formal written arguments to the seemingly casual discussions in the design studio.

A4515	Network Culture	3 pts
Varnelis		

The purpose of this seminar is to come to an advanced historical understanding of the changed conditions that characterize our networked age. As a history of the contemporary, the seminar is organized around a series of topics tracing a genealogy of present-day culture, focusing on the network not merely as a technology with social ramifications but rather as a cultural dominant that connects changes in society, economy, aesthetics, urbanism, and ideology.

A4517	Exotic Moderns “Globalizations and	3 pts
Hosagrahar	‘Other’ Modernites “	

This seminar explores the fragmented, complex, and paradoxical urbanism of contemporary cities outside the conventional West. We will examine what happens when global modernity engages with particular places, localities, and traditions. Student will select a city of their choice for their research projects to comparing historical/traditional built forms with contemporary designs and interventions.

A4535 Fundamentals of Digital Design 3 pts
Cerone & Green

A4538 Researching Research 3 pts
Kim

This seminar examines the history and theory of applied research practice in recent architecture and urbanism, and in turn, experiments with the production of novel techniques of inquiry. This course is structured around a series of topics, each focused on a technique or protocol of applied research.

A4566 Collecting Architecture Territories 3 pts
Wasiuta

A4579 Thinking Race, Reading Architecture 3 pts
Wilson

Thinking Race, Reading Architecture will examine the nascent topic of the racial in architecture. Students in the course will closely read primary treatises and manifestos, scholarly essays and books, along with drawings, models, buildings, and urban plans to trace a genealogy of how the racial shaped modern architectural discourse and practices.

A4596 12 Diagonal and Poetic Strategies 3 pts
Safran

A4598 Modern Housing 3 pts
Wright

This seminar will explore key themes and examples of 20th- and 21st-century modern housing around the world.

A4605 Sherer	Italian Renaissance Architecture, 1400-1600: Regola and Invenzione	3 pts
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The course will provide a historical overview of the major figures of Italian Renaissance architecture from 1400 to 1600—Brunelleschi, Alberti, Leonardo, Bramante, Raphael, Antonio da Sangallo the Younger, Michelangelo, Peruzzi, Giulio Romano, Sanmicheli, Sansovino, Palladio, Serlio.

**A4609 World Architecture Project: Representing 3 pts
Lelyveld the Chinese Built Environment in Context and Print**

The seminar examines the shape and habits of English language in-print coverage of the Chinese built environment over the last 100 years—a period of history matching China's post-imperial history. This investigation will run in tandem with the second project of the course, the very real opportunity of designing a shift in the character of this discussion going forward.

**A4618 Architecture: The Contemporary (Ideas and 3 pts
Tschumi Concepts from 1968 to the Present)**

The “Architecture as Concept” seminar takes as its starting hypothesis that there is no architecture without a concept, and that concepts are what differentiate architecture from mere building. It will attempt to demonstrate that the most important works of architecture in any given period are the ones with the strongest concept or idea rather than simply those with the most striking form or shape.

**A4620 Building China Modern 3 pts
Lelyveld**

**A4623 Sustainable Futures 3 pts
Orff**

This seminar intends to marshal thinking in design and policy towards developing a toolkit of strategies and scenarios for change. Through faculty guidance and relevant readings, this seminar will facilitate informed discussion and exchange.

**A4678 New Spaces of Housing 3 pts
Bell & Loughlin**

This seminar will explore the decreased role of direct federal expenditures play in lower-income and public housing development in the United States since the advent in the 1980's of low-income housing tax credits (LIHTC) and other tax based incentives for housing development. The seminar lectures will address how changes in funding mechanisms have affected not only the development and design of lower-income and public housing, but also how these changes in means have been perceived and what impact they had on the engagement of planning and architecture practices with issues of poverty and low-income housing.

**A4722 Network City: The Extreme City and the Megalopolis 3 pts
Varnelis**

Network City explores how urban areas have developed as ecosystems of competing networks since the late nineteenth century. Throughout the course, we will explore the growth of both city and suburbia (and more recently postsuburbia and exurbia) not as separate and opposed phenomena but rather as intrinsically related. Although the material in the course is applicable globally, our focus will be on the development of the American city, in particular, New York.

A4775 Art Power + Space in the Middle East 3 pts
Gooden

The seminar will examine the production, consumption, and dissemination of Middle Eastern art and the subversive strategies of artists to engage in new spaces for social and political critique. The seminar will uncover pedagogies and methodologies for artistic practices to locate new sites of meaning in contested territories and among contradictory landscapes.

A4803 Dictionary of Received Ideas 3 pts
Walker

This seminar is the fifteenth installment in a decade-long project (2006—) whose aim is to examine received ideas—in other words, ideas which have been depleted of their original intensity due to recurrent use—in contemporary architecture culture. Based on Gustave Flaubert's unfinished project, *Le dictionnaire des idées reçues*, this ongoing series of theory seminars and design studios proposes to disclose, define, and date—and in the long run archive—received ideas prevalent over the past decade, both in the professional and academic realms, in order to ultimately open up otherwise precluded possibilities for architectural design and architectural theory.

A4804 Program 3 pts
Walker

This seminar will examine the trajectory of the notion of program. Specifically, it will focus on the various terms coined in the field since the fifties to describe—in fact, to reduce—actions in space: from function to behavior, from situation to event, from use to organization. The seminar is structured upon twenty exemplary projects regarding questions of program. Each session will interrogate two projects, and scrutinize the concepts they articulated, the objectives they pursued, the critiques they entailed, and the practices they implied. Ultimately, the seminar will attempt to trace a genealogy of design strategies formulated to program architecture.

A6163 Latin American Architecture 1929 – 2012 3 pts
Brillembourg

Case studies of the work of prominent and lesser-known architects will be presented that emphasize the relationship with the human and natural landscapes of different regions of North, Central, Antillean, and South America. Four generations of architects will be studied. These cultural exchanges will be analyzed and their stories will help us see all at once the complexity and contradiction inherent in the particular modernity of this large territory.

A6165 Structuring Contemporary Cities Problems of Sample-Meredith Health 3 pts

A6310 Indigenous Eco-Tech and Bio-Cultural Watson 3 pts

A6390 Postwar Japanese Architecture Kudo 3 pts

This course looks into Japanese post war with together US and Euro, how thoughts and forms were migrated, influenced and merged each other to create the newer the more excited through each other countries, cultures and domains.

A6453 Corporate Avant-Garde: Get Yourself Together 3 pts Franch, Leonge, Reidel

This research and design seminar challenges the dominant contemporary models of architectural production by analyzing the history of the architectural office in relation to other contemporary forms of collective creative production. With the aim to redefine the systems, protocols and spaces of architecture production, this seminar seeks to reinvent the way we work and ultimately produce architecture.

A6454 Arab Cities in Evolution 3 pts Andraos

While focused specifically on production in the Arab World, the seminar will attempt to both learn from local specificities and move beyond them, considering the issues apprehended, from questions of representation to the challenges posed by globalization, as presenting a wealth of critical opportunities to learn from and point to alternate possibilities, not only for the region's cities but also for our increasingly urbanized world.

A6455 Vauban's Military Urbanism 3 pts Sanger

This course highlights how warfare shaped the Early Modern City (ca. 1500-ca.1800).

We will begin with the origins of the bastion and its effect on town planning in the Renaissance period and conclude with a study of the impact of this approach to cities in the eighteenth century to the present day. Throughout we will question the relevance of this period to current considerations of national defense, power relations and surveillance.

A6457 Architecture vis-à-vis Ideology 3 pts
Weiss

This seminar in the area of architecture vis-a-vis ideology is designed to explore contemporary architecture that works with, or around, contemporary aspects of ideology

A6459 The New University 3 pts
Martin & Cole

This seminar will reflect on the future of the American research university—what Jonathan Cole, summarizing its extraordinary success over two centuries, has called the “Great American University”—in a rapidly changing world context. Together, readings and guest speakers will offer a variety of perspectives on the challenges and possibilities faced by large research universities in the United States and worldwide.

A6671 Forming Alliances + Dismantling Oppositions 3 pts
Foyo

The course will offer an open ended set of primordial binary relations that contribute to contextualize architecture. The course intent is to foster the critical use of language as a generative-liberative tool that can inspire more holistic and meaningful design criteria and/or design methodologies and/or design decision making. The objective is to stimulate freethinking and to let go of the use of language as a hollowed out lexicon; a hollowed out lexicon reduced to the quality of the sound bite; a sound bite that potentially fosters stereotyped thinking (advertisement and marketing at the gate).

A6672 Double Exposure 3 pts
Foyo

The course will be analyzing the 'courtyard dwelling typology' as a phenomenological case study that throughout history has embodied equally universal and local values at both the architectural and the urban-civic levels.

A6707 Agency, Ideology, & Critical Practice 3 pts
Carver

A6769 History of The American City 3 pts
Wright

The process of continuity and change in American cities from the colonial period through the 20th century, covering industrialization, political conflict, reform movements, geographical and ethnic diversity, bureaucratic rationalism, and urban culture—with a focus on how physical form responded to or influenced social and political forces over time.

A6778 Imperatives of Urbanism 3 pts

Inaba

The lecture course will examine the urban problematics defined by architects from the 1970s to the present, inventorying the conditions they believe to impact urban form, disciplinary debates, and the role of the designer. From the Culture of Congestion to Landscape Urbanism, the course will probe the concepts architects have developed to give form to the city.

BUILDING TECHNOLOGIES

A4111 Architectural Technology I 3 pts

Schwitter

Architectural Technology 1 (AT1) begins with an introduction to structural physics, and a typological study of structural components and systems at building scale. Next, the class covers a typological study of building enclosures and habitats, including environmental forces on enclosure systems, energy considerations, and construction of common enclosure systems. The course includes an introduction to structural and energy software, structural demonstration labs, analysis of case-study examples, field trips to buildings in construction, and juried design assignments.

A4112 Architectural Technology II 3 pts

Kienzl

Architectural Technology 2 (AT2) provides an in-depth look at energy and environmental-conditioning considerations in architectural design. Human environmental needs and comfort levels are outlined, as well as sources of atmospheric chemistry, light, temperature, moisture content, etc. Man-made systems are compared to natural (outdoor) climate-control mechanisms. Both historical examples and contemporary case studies are used to develop an understanding of environmental control systems and their relationship to the spaces they service.

A4113 Architectural Technology III 3 pts

Laufs

Architectural Technology 3 (AT3) covers an advanced- level study of structures and structural systems at building scale to teach a sound structural understanding of systems and principles as supportive technical knowledge for architecture students early in the design process, yet establishes more unusual, complex three- dimensional ways to form and support spaces.

A4114 Architectural Technology IV 3 pts
Hibbs & Wallance

Architectural Technology 4 (AT4) begins with a five-week continuation of the energy and environmental-conditioning considerations begun in AT2. The remainder of the course is devoted to the in-depth analysis of recent American architectural works. Working in groups of four from the construction documents for an important project, students prepare a detailed study of the building's technical-utilitarian systems, including their workings, their interactions with each other, and their relationship to the designer's formal and spatial intents. This analysis is run in studio format, with weekly crits from technically-savvy architects, structural engineers and mechanical engineers.

A4115 Architectural Technology V 3 pts
Hibbs + Wallance

This course is entitled Architectural Technology 5 (AT-5). It might be subtitled Intentions and Technology. AT-5 is a tech class in which your design skills are an essential tool that you will use to synthesize the various technical systems of a contemporary building type into a coherent expression of an architectural intention. Technical rigor is the precondition for design. If it doesn't work, you will have to redesign it until it does.

A4118 Exalted Structure 3 pts
Kostura

This class is not just about cathedrals. But in cathedrals we often find pure harmony between structure and aesthetic, where the structure itself is expressed to add spatial tension and heighten the experience of its occupants. Students will gain a holistic understanding of these essential characteristics through group-based research and design projects.

A4627 Materials + Methods in Architecture 3 pts
Kaseman

Materials and methods of construction through hands-on experience in a shop environment, supported by research and discussion. Traditional and innovative building methods using a variety of materials are studied.

A4628 Acoustics 3 pts

Patel

This course covers the fundamentals of acoustics and its application to design in the built environment. The format is interactive; lectures have images, video, listening, sound creation, sound visualization and sound measurement. We will investigate the relationship between sound and architectural space, encouraging students to think about how different types of buildings sound as well as understanding the impact that sound, noise, and vibration, have on design in the built environment.

A4634 Advanced Curtain Wall 3 pts

Heintges

An in-depth exploration of the practical technical knowledge necessary to undertake in practice the design, detailing, specification, and construction administration of the building enclosure, with an emphasis on available and emergent technologies of the curtain wall.

A4635 Architectural Daylighting 3 pts

Norris

A4656 Fast Pace / Slow Space 3 pts

Bearak & Borders

Parametric and computational software offer designers a high degree of specificity which can be used to create complex forms, intricate details, and material efficiency, yet high-level results become insignificant if construction methods are too complicated to be timely. Fast Pace/Slow Space will focus on the marriage of complex form and logical assembly, with detailing, hardware and construction methods informing design decisions from the onset.

A4682 Advanced Energy Performance in Architecture 3 pts

Schwitter

Advanced Energy Performance will expand upon previous work in the AT sequence. It will explore the integration of three primary aspects of built form: energy use, envelope design and lighting. An understanding of the integrated nature of these design influences will be the ultimate outcome of the course.

A4707 Digital Detailing: Simulation & Analysis 3 pts

Collins & Hasegawa

The goal of the class is to incubate a series of research proposals on the topic of performance design. We define performance as optimally working within a defined context of measurement, including but not limited to structural performance, energy, lighting, acoustics and even aesthetics and beauty.

A4763 The Optics of Architecture 3 pts
Anzalone

This course will seek to explore this relationship by staring at the foundations and first principles of optics, covering the electromagnetic spectrum, interaction with materials through transmission, reflections & absorption. From this foundation the lectures will evolve to incorporate the applied aspect of optics such as perception, construction, and other elements of the physical act of lighting.

A4776 Man, Machine & the Industrial Landscape 3 pts
Gallagher

This course examines past and present strategies of meeting the growing industrial and infrastructural demands of our society. In order to identify areas where industrial technologies and/or landscapes might be re-calibrated to serve future infrastructural networks the course explores new relationships between the public, local ecology and industry.

A4781 Surface, Screen & Structure 3 pts
Vidich

This course focuses on the design and digital fabrication of sun screening systems. Primarily an applique, the screens will perform as ornamental expression and functional shading. Students will design thoughtful solutions that are graphic, spatial and creatively resolve light transmittance and structural requirements.

A4783 Workflow: Designing Design 3 pts
Marble

This seminar is aimed at students who are interested in rethinking architectural practice. It is based on the premise that any significant change in the architectural, engineering and construction (AEC) industry will come through a disruptive shift in the culture of the industry driven by the next generation of architects...you. It is less about how practice and industry work now and more about how it could work in the future. Students will be exposed to the most current thinking on the structure of industry with an emphasis on the role that digital communication tools are having in its reorganization.

A4788 Modular Architecture: Strategy / Technology / Design 3 pts
Wallance

We are about to experience an unprecedented and transformative change in the way we design and build our cities. This course will focus mainly on a studio design problem, in which the students will develop a modular solution to a multi-story urban infill building on a site located in NYC.

VISUAL STUDIES

A4023 Visual Studies I – Architecture Drawing 3 pts
Uhl, Nagy, Goberna and Representation I

In this course, we will engage drawing's new temporal nature and try to harness its potential. What does it mean to make a drawing in the 'Post-Projection' era? What is lost when an understanding of the constructed nature of a drawing is gone and the tools of projection are relegated to a secondary role? What can be gained through understanding these tools more completely and then re-appropriating them in contemporary investigations?

A4024 Visual Studies II – Architecture Drawing 3 pts
Kurgan, Nagy, Shima and Representation I

Visualization tools and drawing have changed radically over the last century, in both the practice and pedagogy of architecture. The course charts these shifts, beginning with the presumption that there are strong links between old and new media, analogue and digital methods, drawing with pencils, and drawing with software.

A4141 Beyond Prototype 1.5 pts
Ivaliotis

The relationship between the components of structure and the components of enclosure is conventionally considered to be mutually exclusive. However, in an environment where material efficiency and speed of fabrication is becoming more important, there exists an opportunity for the architect to intervene within the fabrication process to assimilate both structure and envelope into one hybridized system that abolishes exclusivity and attains a higher level of efficiency. This course will encourage and enable students to use digital software as a generative tool and the laser cutter, CNC Mill, plastic bender and welder as a means to bring virtual systems into the physical realm.

A4524 The Topological Study of Form 1.5 pts
Sanchez

This class will start with an introduction of Polygon tools, NURBS tools and procedures use in form making for industrial design. From the industrial design introduction, we will focus on the topological study of form using anamorphic time-based geometry tools

A4525 Simulation Origin of Tangible Form 1.5 pts

Sanchez

The workshop will focus on generation of visual constructs dealing with the notion of simulation and representation. We will undertake simulation as the origin of a reality, not as a representation of a formal construct, which can deal with the generation of behavioral models and abstract events without a tactile origin, hence avoiding representing an environment or event.

A4534 Techniques of The Ultrareal 1.5 pts

Brennan & Crupi

The use of perspective and rendering is often an afterthought. With the abundance of 3D modeling software and the ability to see every angle of a project instantaneously, renderings are often a last minute tool for representation. This class challenges the participants to not only think of rendering as a method of presentation, but also a tool for design. We encourage the use of perspective and rendering early and often in the process.

A4542 Imagining The Ultrareal 1.5 pts

Brennan & Crupi

The use of perspective and rendering is often an afterthought. With the abundance of 3D modeling software and the ability to see every angle of a project instantaneously, renderings are often a last minute tool for representation. This class challenges the participants to not only think of rendering as a method of presentation, but also a tool for design.

A4676 Architectural Photography 1.5 pts

Attali

The scope of this course focuses on using the medium of architectural photography as a critical tool for analyzing and representing buildings. By contextualizing and framing the relationship between an architect and his or her work, it becomes easier to understand the intent behind the design process. On a practical level, the class teaches soon-to-be architects what to expect and what to desire from documentation of buildings they might design in the future.

A4612	Architectural Photography II	1.5 pts
Attali		

The course will discuss photography as a medium to interpret aesthetic intent and express subjective understanding of building or urban space. Students will explore these issues by producing a series of images that cover a range of architectural themes: cityscape, urban landscape, residential, commercial and public spaces. Technical, historical and aesthetic aspects of photography will be covered in this course.

A4711	Search: Advanced Algorithmic Design	1.5 pts
Hasegawa & Collins		

This workshop promotes simple, visual programming as a vehicle for designers to take their ideas to the next level by collaborating with the computer at its most potent level: code. We teach programming through a series of workshops, competitions and project work. We work in Processing, an open source programming environment created for visual thinkers working in two and three dimensional media. No programming experience is required.

A4715	Re-Thinking BIM	1.5 pts
Lee & Green		

What is the place of BIM in architecture? Is it only meant for production, or can architectural design benefit from the real time feedback of Building Information Models. BIM can, and will change the profession--this generation is responsible for how that will be. Not having to deal with professional demands, students in this course will be able to explore BIM strategies which in the workplace are not possible.

A4716	Graphic Presentation I	3 pts
Choi-A4716.001		
Meier-A4716.002		

The Graphic Architecture Project is a way of thinking about the intersection of the flat and the deep. Over the past few years we have been looking at how design concepts like branding, display and advertising affect the practice of architecture. This semester we want to examine, in rather minute detail, aspects of presentation: that is the visual rhetoric employed to convey design concepts. We are especially interested how diverse forms of representation—plan, section, elevation, perspective, diagram, rendering, etc—combine with typographic language in complex graphic and discursive narratives.

A4717	Graphic Presentation II	3 pts
Chiao & Yun		

The Graphic Architecture Project is a critical investigation into the intersection of architectural design and graphic form. This class looks specifically at diagramming and graphic communication through the lens of the architectural process. The course will focus on key touch points in the process from pre-design to post occupancy that will help frame visual representation throughout the design process. The content of these exercises will be drawn directly from your studio/research projects.

A4718 Cinematic Communication 1.5 pts

Szot

This workshop focuses on digital video as a tool for dissecting and reinventing the physical environment. It is designed to introduce students to the architectural potential within the advanced features of Adobe Premiere and basic functions of Adobe After Effects. Presentations and discussions throughout the workshop are organized around two brief assignments that will cover advanced pre-production techniques, advanced motion graphics, and basic compositing techniques.

A4726 Other Design Seminar: Multi-Screen 1.5 pts

Rock & Stanescu Experiences

In this seminar we will consider the challenges of multiple screen experiences focusing specifically on the design and narrative possibilities of a mobile theater designed for moving image and sound. Together we will research the history of the multi-screen theater and the artistic, financial, technical and design constraints that will shape possible outcomes. The class will consist of readings, class discussion, research presentations and a concept design presentation.

A4730 Adaptive Fabrications 01 1.5 pts

Modesitt

This session will focus on CATIA as a tool for authoring adaptive, parametric geometry. As the evolving nature of design requires us to handle more complexity at a faster pace, it is becoming increasingly important to create flexible, scalable systems that can accommodate change.

A4731 Adaptive Formulations 02 1.5 pts

Modesitt

This session will be dedicated to the use of Catia as a collaborative environment for coordinating design. We will use its unmatched ability to organize, visualize, navigate and analyze a vast amount of geometry in conjunction with native tools for dynamic sectioning, 3D annotation and measurement to propose alternate, more efficient methods of communicating design beyond the 2D drawing.

A4741	Field of Play: Agency Mapping Site	1.5 pts
Brush		

This class will investigate techniques in GIS for visualizing spatial data as instrumental geometry for design. We will explore these techniques within the conceptual framework of "territory." No experience in GIS is required, however familiarity with Rhino and Max is suggested.

A4747	Parametric Realizations	1.5 pts
Bearek & Borders		

Parametric modelers are commonly used in the development of digital architectural models, but they are rarely taken to the point of becoming physical realities. This course will look at the process of generating parametric algorithms then turning those models into physical realities. Students will work in groups to design a product that will be the physical realization of their scripted protocol.

A4748	Special Topics in Fabrication: Field Fabrication	1.5 pts
Draper & Hagan		

Formworks will be staged in two sessions over the semester. The second session, Field Fabrications, will iterate the prototypes, producing a larger array of robust servo devices. Full castings will be made using the system. The course will focus on pre-cast facade tiling to maximize the graphic qualities of the process.

A4753	Special Topics in Fabrication: Design Machine	1.5 pts
Draper & Hagan		

Formworks will be staged in two sessions over the semester. The first session, Design Machine, introduces students to mechatronics techniques using Firefly, Arduino and two basic servo devices - stepper motors and linear actuators. Students will make a prototype servo device, which forms the basis of a larger system, to mechanically and computationally demonstrate a system of non-repetitive but parametrically related castings.

A4758	Field of Play II	1.5 pts
Brush		

This course will investigate techniques for visualizing spatial data as instrumental geometry for the design and fabrication of a full-scale site-specific outdoor exhibition pavilion to be built at OMI International Arts Center near Hudson NY at the end of the semester. The second session will focus on translating these visualizations through parametric protocols in Rhino and Grasshopper into 3D models detailed for fabrication

at the GSAPP Laboratory for Applied Building Science. The final product of the course will be the fully-realized installation at OMI.

A4778 Metatool (Formerly Digital Jig) 1.5 pts

Lee

METATOOL is a course about designing experimental design tools, utilizing the Grasshopper software environment as a meta-tool: a tool that enables the creation of other tools. The course is grounded in a solid technical understanding of Grasshopper and hovers around a set of critical history/theory texts and group discussions. Each new experimental tool will result from an examination of an existing design tool, and will be oriented towards the creation of a new design process within Grasshopper (with the optional integration of Python/C#/VB.net).

A4786 Biomaterials: Sustainable Fabrication and 1.5 pts
Parkes Living Forms

This course investigates new materials and new creation processes for biomaterials which present an alternate future for building which taps into the natural processes of living things for growth and fabrication. We will investigate concepts including mycelium (fungal based) bricking systems, 3D fabrication using live silk worms, solar 3D printing from sand, and textiles grown from bacterial cellulose.

A4792 Approaching Convergence 1.5 pts
Bogosian & Llaguno

This course emerges from the assertion that the architect of the very near future will design workflow and software as integrally as projects and buildings. Navigating explorations through, between, and within multiple applications, our students will launch into agenda-driven opportunities for advanced and fluid interoperations to develop built forms out of the environmental big data (abiotic/climatic and social/user data) instead of as previously, occupying it with an imported simulacrum.

A4793 APP-itecture 1.5 pts
Collins & Hasegawa

The goal of this seminar is for each student to develop a “spatial app” (a loose description that means to stimulate thinking on the notion of mobile and embedded technology) that ultimately will be distributed on the Apple App Store at the conclusion of the workshop.

A4794 Body Craft: Form Function and 1.5 pts
Parkes New Material

Human-centered design has emerged as one of the tenets of contemporary design, and studies in ergonomics have taught designers to revere the form and abilities of the body as the standard for analysis in interaction. This course will examine the body in presentation- how the languages of fashion photography, installation, and performance art work in the construction of narrative and fantasy and how technological augmentation can work to recontextualize the relationship between the body, clothing and the environmental experience.

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The aim of the class is twofold: 1) To explore craft, developing a personal understanding of materials, tools, and techniques to directly inform the design process. 2) To frame this exploration in a larger context of analog and digital design and fabrication, highlighting efficiencies and limitations, and rethinking the orchestration of the two by the designer.

A4801 **Encoded Matter** 3 pts
Blasetti

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This workshop will be devoted to the design and prototyping of architectural immersive environments via computational generative methods. At present computational techniques are predominantly employed in the optimization, rationalization or surface decoration of more traditionally created forms and spaces.

A4806 Future Craft I: Radical Sustainability 1.5pts
Bonanni & Parkes and Resilience

Future Craft is designed to look at new ways of making things, from the way materials are sourced and manufactured to the way customers are considered. We are interested in re-configuring industry, its systems and services. This class will look at way to reshape business, technology and design to create new, radically sustainable products and companies.

**A4807 Future Craft II: Design Strategies for
Bonnani & Parkes Sustainability** 1.5 pts

The class is divided into two sessions: a 7-week skills session during which students will learn the latest methodologies for evaluating environmental, social and financial impact (the triple bottom line) and a 7-week proposal and prototyping session, during which students will prepare fleshed out proposals for product or companies.

A4813	Integrated Parametric Delivery	1.5 pts
Lee & Green		

This workshop will insist on interoperability between various platforms, magnifying the strengths of each tool. We will investigate the process of integrating multiple parametric tools simultaneously into a single architectural project. Specifically, we will be designing and developing workflows. Quickly becoming the industry standard for BIM, Revit will be presented as the primary tool for hosting and documenting.

A4814	Hacking The Urban Experience	1.5 pts
Locke		

This course seeks to assert the relevance of the fabrication skills at our disposal as potentialities for social and environmental relevance. Through the re-appropriation and re-imagining of existing urban conditions, the student will harness their entrepreneurial spirit to design and fabricate a series of fast, working prototypes that embrace the messy reality of New York.

A4815	X Information Modeling	1.5 pts
Wilson		

This course will examine the maturity of the 21st century metropolis by moving past conventional benchmarks and preconceptions of growth to develop flexible design systems founded on a holistic approach to economic, environmental, and social problems that will allow for speculation on many possible futures for the city

A4819	SITE TO SITE: Site to Web	1.5 pts
Therrian & Barley		

The course will proceed reflexively. We will investigate the necessary means for designing, representing and analyzing architecture online by producing them and using them ourselves in the process. Specifically, we will build a platform for putting architecture online, a collection of networked sentient objects and the protocols and standards that will allow them to communicate digitally with one another, as well as spatially and organizationally with architecture.

A4820	Designing Interactive Narrative Through	1.5 pts
Berner	Data Visualization	

In this course, we will delve into why a set of data requires depiction, research to uncover the story within, and strive to integrate our visualization and its narrative. The course has two main goals: first, to provide grounding in the design of elegant and meaningful data visualizations, and second, to provide a technical introduction to implementing data visualizations using D3 and web technologies.

A4823 Intelligent Systems / Interactive Architectures 1.5 pts
Payne

This class will focus on hardware and software prototyping techniques; primarily focusing on a wide range of sensing and actuation modalities in order to build novel interactive architectural prototypes. Using remote sensors, microcontrollers (Arduino), and actuators, we will build virtual and physical prototypes that can communicate with humans and the world around them.

A4829 XIM: Parametric Massing & Optimization 1.5 pts
Wilson

This course will examine the maturity of the 21st century metropolis by moving past conventional benchmarks and preconceptions of growth to develop flexible design systems founded on a holistic approach to economic, environmental, and social problems that will allow for speculation on many possible futures for the city.

A4831 Drawing After the Computer 1.5 pts
Bryan

Whether we are translating into the flat, planar mode of a drawing or the tectonic mode of a physical model, the purpose of this act should be more than to merely satisfy an established convention or fulfill an arbitrary requirement. However, in a world in which we still feel obligated to render these constructions after the design is complete, we must ask ourselves why we still bother at all. This series shall serve as a laboratory in which these very questions shall be explored.

A4832 Lines not Splines: Drawing is Invention 1.5 pts
Kumpusch

This intensive workshop formatted course is rooted in three propositions: that drawing is as much a way of seeing as it is a means of representation; that drawing is not bound to digital versus analog categorizations; and that drawing remains the primary vehicle to record, communicate and create architecture.

A4833 Modeling After the Computer 1.5 pts
Bryan

Starting with the same virtual model, this second half-course shall explore the act of modeling as more than an act of physical embodiment/scale/construction. As with drawing, embedded within the desires of the modeling is also an attitude towards exploration/explanation/evaluation. Students shall produce a method of fabricating that not only establishes how an object becomes constructed, but also examines the underlying principles of construction.

A4834 & A836 Datamining the City I & II 1.5 pts
Nagy

A4841 Algorithms and Urbanisms: SimCity 3 pts
Wilson

This course will investigate the range of algorithms, metrics and benchmarks increasingly used today for tracking the performance of cities. Students will begin by using the metrics available in SimCity to evaluate historic, ideal, and contemporary cities. They will next develop additional evaluation criteria--both quantitative and qualitative--they think lacking in SimCity but critical for understanding the performance of cities. Through this process, we will discuss the underlying urban assumptions and algorithms built into SimCity and how they impact a general understanding of the design and function of cities.

A6134 Facing Energy
Therrien

Funded by the GSAPP Future of Energy initiative, students will work in small groups to define, design, develop, deploy and test an architectural energy interface with a budget to manage and dispense. Each group will develop a position on the topic of energy and a strategy that will lead to a corresponding interpretation of the interface. Whether a poster, book, installation, app, appliance, campaign, service, blog or symposium, the objective will be to define, measure and create impact.

METHODS/PRACTICE

A4560 Professional Practice 3 pts
Segal

Turning designs into buildings. A general introduction to the business of architecture, covering architects' services to owners, contractors' services to owners, financial managements of office and projects, and public constraints such as zoning and building codes.

A6900-A6901 Research I & II 2 - 3 pts
Smoller

Each student selects and area for investigation, plans and approach to his or her chosen subject matter, and develops and adequate presentation of findings. The project may involve experimentation, accumulation of physical data, consultation with recognized

knowledge of the chosen subject.

**A8906 PhD Seminar: Architectural Infrastructures
Martin and Cultural Techniques** **3 pts**

This doctoral research seminar will consider recent scholarship that focuses on architectural infrastructures, which we will relate to the notion of "cultural techniques" (or cultural technologies, Kulturtechniken) and its precursors in media theory and history.

**A8904 Architecture Doctoral Coll. I
McLeod** **3 pts**

Subjects a well-defined body of theory to scrutiny and assessment. Examples: The Warburg School of Aesthetic Theory (E. Cassirer, E. Panofsky, E. Gombrich, R. Wittkower, etc.); Phenomenological Theory in relation to architecture dealing with the theoretical work (E. Mach, M. Merleau-Ponty, G. Bachelard, C. Norberg-Schulz, A. Perez-Gomez); tracing the impact of the evolution of Post-Structuralist/Deconstructionist Theory on architecture (P. de Mann, J. Derrida, M. Wigley, P. Eisenman).

MASTER OF SCIENCE DEGREE IN ADVANCED ARCHITECTURAL DESIGN (MSAAD)

DIRECTOR: Enrique Walker

THE PROGRAM

The Master of Science degree in Advanced Architectural Design is a three-semester program consisting of summer, fall, and spring terms.

The objective of the program is to provide outstanding young professionals who hold a B.Arch. or M.Arch. degree the opportunity to enter into an intensive postgraduate study that encourages critical thought in the context of design speculation. Overall, the program emphasizes an experimental approach to architectural design and research, rigorously grounded in multiple, complex realities. Specifically, the program seeks to engage students in a worldly understanding of architecture that responds to the challenges and possibilities of global urbanization by exploring the city in all its forms; articulate architecture as a cultural practice that combines reflective thought, design experimentation, and ethical responsibilities in an interdisciplinary milieu; produce architectural objects that reflect an open, critical engagement with new and existing technologies.

The advanced studios frequently utilize New York City as a design "laboratory" -a global city that presents both unique challenges and unique opportunities. The required summer lecture course, Metropolis and after, explores architecture's historical and contemporary role with respect to changing notions of the city, while accompanying summer elective courses are conceived as seminars in "strategic thinking." These are all designed to offer students a range of approaches to working with complex cultural and technological issues, while the program as a whole has long been a site for young architects from around the globe to test new ideas and confront changes that affect architecture and cities worldwide.

ADMISSIONS

Applications are due January 15. All applicants for admission to the program must have a B.Arch. or M.Arch. degree or the equivalent. In addition to the application form and required supporting documents, applicants must submit a portfolio containing examples of their architectural designs, particularly from the last two years of undergraduate training. The portfolio should not exceed 8.51 by 11 inches, should not measure more than .5 inch in thickness, and should be submitted with the application. The portfolio will be returned by mail only if sufficient postage and packaging are included and if the return address is indicated on the portfolio. Applicants for this program enter in the summer term; they must attend on a full-time basis for three consecutive semesters.

ORGANIZATION OF THE PROGRAM

The program is viewed as a framework in which both academic and professional concerns are explored. A set of required studios and courses is enhanced by limited and open electives that are shared with other programs in the School and that promote intellectual cross-fertilization among disciplines. A required lecture course on architecture and the city, exclusive to the program, provides grounding for architectural exploration in the studio. "Limited electives" are those School offerings designated as appropriate by the director. "Open electives" are graduate-level courses of the student's choice. Fall and spring studios are shared with final-year Master of Architecture students.

PROGRAM REQUIREMENTS

The M.S. degree in Architecture and Advanced Architectural Design requires 45 points in the following curriculum. (A minimum of 12 points must be taken each semester).

TERM 1 (SUMMER)

A6853	DESIGN STUDIO	9 pts
A4511	METROPOLIS	3 pts
	ARGUMENTS	3 pts
	OPTIONAL VISUAL STUDIES ELECTIVE	3 pts
	TOTAL	15-18 pts

TERM 2 (FALL)

A4509	ADVANCED ARCHITECTURE STUDIO V	9 pts
A4511	HISTORY / THEORY ELECTIVE SEMINAR	3 pts
	HISTORY / THEORY OR VISUAL STUDIES ELECTIVE	3 pts
	TOTAL	15 -18 pts

TERM 3 (SPRING)

A4006	ADVANCED ARCHITECTURE STUDIO VI	9 pts
	HISTORY / THEORY ELECTIVE	3 pts
	HISTORY / THEORY OR VISUAL STUDIES ELECTIVE	3 pts
	TOTAL	15 pts

Note: Students are strongly advised to take one additional 3- or 4-point elective during each term. No extra tuition is charged between 15 and 19 points. Courses may be dropped until the tenth week into the semester for fall and spring terms. Summer courses may be dropped until two-thirds of the class meetings have been held.

COURSES OF INSTRUCTION

A6853, A4005, and A4006 Design Studios	9 pts
The Staff	

Provides an opportunity for qualified and experienced architects to bring design projects to a high degree of resolution and refinement. The procedure is one of continual design and redesign. Other short exercises are frequently given during the three-term period.

A4402	Metropolis	3 pts
	Enrique Walker	

MASTER OF SCIENCE DEGREE IN ARCHITECTURE AND URBAN DESIGN

DIRECTOR: Richard Plunz

THE PROGRAM

The Master of Science degree in Architecture and Urban Design is oriented toward architects who have already received a professional degree and who wish to concentrate further on the study of design considerations related to urban form.

Urban Design introduces a way of thinking about the city that is more complex and inclusive than architectural design, yet more form oriented than the discipline of urban planning. The course work explores this realm between architecture and planning, as well as such areas as cultural theory, sociology, urban ecology, geography, economics, and real estate. The base endeavor, however, is architectural design, which serves as a catalyst for incorporation of wide-ranging perspectives from other disciplines. In this sense, the program is considered experimental, exploratory, and unorthodox in comparison to the established canons of the traditional architectural design studio. The faculty are committed to the architectural investigation of urban phenomena on all scales. In one sense, the curriculum attempts to further the role of urban design as a form of critical inquiry. The theoretical base originates with the 1960s, when the present critique of "modernist" urbanism first developed. Crucial to this foundation are such diverse tendencies as the Situationist International in Europe, the "Collage City" adherents in the United States, and the so-called "systems approach" that emerged universally out of the beginnings of the cybernetic age.

The curriculum engages the state of twenty-first-century urbanism, especially of those cities that have come of age in the modern industrial era and now face the transition to new forms and meanings. A dialogue is woven between New York City, which is the primary focus of the program, and other world capitals with analogous contemporary conditions. It also moves between the recent theoretical debate on future urbanism and applied projects that directly engage the realities of the transformation of the post-industrial city. In this way, the program attempts to engage both the daily reality of our urban condition and the theoretical abstraction of current academic debate—not one to the exclusion of the other.

The Urban Design Program embraces a special relationship between the design studio and the New York City region through collaboration with government agencies and other public interest constituencies. This collaboration interjects a heightened degree of reality and immediacy within the academic program; and in return it gives public institutions a valuable resource for exploration of critical issues. In the final semester the focus shifts to one or two other world cities comprising a similar collaboration with the appropriate local agencies and constituencies. Recent studios have worked in Antwerp,

Barcelona, Belgrade, Brisbane, Brussels, Bucharest, Caracas, Istanbul, London, Mexico City, Mostar, Naples, Prague, Rome, and Seoul. Problems raised by all of the studios connect to concrete urban situations from which inquiry proceeds to a particular balance of "real" and "theoretical," depending on specific circumstances. Graduates gain the conceptual tools with which to manage the complexities of design intervention as a catalyst for urban development.

ADMISSIONS

Applications are due February 15. All applicants for admission to the program leading to the M.S. degree in Architecture and Urban Design must have a B.Arch. or M.Arch. degree or the equivalent. In addition to the application form and required supporting documents, applicants must submit a portfolio containing examples of their architectural designs, particularly from the last two years of undergraduate training. The portfolio should not exceed 8.5 by 11 inches, should not measure more than .5 inch in thickness, and should be submitted with the application. The portfolio will be returned by mail only if sufficient postage and packaging are included and the return address is indicated on the portfolio. The Graduate Record Examination (GRE) is not required.

Applicants for this program enter in the summer term; they must attend on a full-time basis.

ORGANIZATION OF THE PROGRAM

The core of the Urban Design curriculum is the three-semester sequence of related studios and seminars. In summary, the material of the first-semester studio represents an introduction to the morphology of New York, from center to inner periphery to edge city. The first semester seminar provides an overview of the contemporary literature on the question of postindustrial urbanism. The second semester studio is focused in detail on the singular issue of rebuilding older urban areas within the New York region. Its seminars investigate the question of anonymous urban fabric with comparative study of New York and other world cities. The topic of the third-semester studio moves to another city for comparative purposes, and is primarily engaged with the issue of restructuring and rebuilding the nineteenth- and twentieth-century fabrics. The seminars continue to explore recent theoretical debate focused on the problematic of public space in the 21st-century city.

PROGRAM REQUIREMENTS

The M.S. degree in Architecture and Urban Design requires 45 points in the following curriculum:

TERM 1 (SUMMER)

A6849	URBAN DESIGN STUDIO I	9 pts
A6836	URBAN DESIGN SEMINAR I	3 pts
A6824	READING NEW YORK URBANISM	3 pts
	TOTAL	15 pts

TERM 2 (SPRING)

A6850	URBAN DESIGN STUDIO II	9 pts
A6837	URBAN DESIGN SEMINAR IIA	3 pts
A6832	URBAN DESIGN SEMINAR, IIB OPEN ELECTIVE	3 pts
	TOTAL	15 pts

TERM 3 (SPRING)

A6851	URBAN DESIGN STUDIO III	9 pts
A6838	URBAN DESIGN SEMINAR IIA	3 pts
A4688	URBAN DESIGN SEMINAR, IIB OPEN ELECTIVE	3 pts
	TOTAL	15 pts

Note: Students are advised to take one additional 3- or 4-point elective during each term. No extra tuition is charged between 15 and 19 points. Students requiring an introduction to computer modeling and multimedia techniques will be required to register for Architecture A4528-Digital modeling for urban design in the summer term.

COURSES OF INSTRUCTION

A6849 Urban Design Studio I 9 pts
The Staff

An introduction to issues and methods of the subsequent urban design studios. Three short projects form the basic studio structure: (1) Analytic introduction to the morphology

of the city, from center to inner periphery to edge city. (2) Esquisse development urban design models in typical conditions explored above, with development of a single complex urban design thematic program. (3) Application of the program to a central city-specific site.

A6850 Urban Design Studio II 9 pts

The Staff

A semester-long urban design project that explores at various scales proposals for rebuilding the abandoned inner-city neighborhoods. The project involves regional infrastructure, nodes of development, and diverse programmatic elements set in a large, deteriorated site condition (to be coordinated with various public agencies).

A6851 Urban Design Studio III 9 pts

Plunz

A single project explores the making of urban fabric rather than urban monument. It also explores multifunctional programmatic invention, which can reflect possible future urbanities. Emphasis is placed on developing the morphology for an urban block, together with a support infrastructure capable of directing repetition and transformation. The study of New York City is expanded to a comparative proposal for another world city.

A4005 Joint Urban Design/Architecture Studio 9 pts

The Staff

This studio option is offered in the fall semester to encourage exchange between the Urban Design and Architecture curricula. Thematically, the studio investigates cultural catalysts in urban development. The studio is open to M.Arch. and MSAAD students. Students collaborate to explore questions that include the economic role of urban development, relations between the production and consumption of culture, urban cultural displacements and social class, and the design of public space as civic activity.

A4528 Digital Modeling for Urban Design 3 pts

The Staff

Introductory class for architects with limited or little background in digital techniques of urban representation. Focuses on computer modeling, animation, and depiction, using the Macintosh-based applications of Premiere, Director, Dreamweaver, and Flash. Also includes an introduction to geographical information systems and the integration of statistical data with methods of formal and spatial representation.

A6824 Reading New York Urbanism 3 pts

The Staff

Investigation of theoretical issues related to the contemporary city, using New York City as a laboratory and test case. The course provides critical, analytical, and graphic tools with which to undertake complex problems of urban design with emphasis on digital representation.

A6836	Urban Design Seminar I	3 pts
Chasin	The Post-Urban American City	

Provides an introduction to 20th-century American urban and suburban landscapes with a concentration on post-1945 transformations. The seminar charts the history of the dual processes of regionalization and centralization which have shaped, and continue to shape, the built landscape. In this light, the history of the “post-urban city” is scrutinized in three broad areas: formative processes; theoretical responses by urban designers, planners, and architects; and the nature and character of realized projects.

A6837	Urban Design Seminar IIA	3 pts
Plunz	Case Studies Within the Modern Urban Fabric	

Exploration of the language of autonomous urban fabric examined for a range of large cities in relation to comparable New York contexts. Emphasis is placed on housing form as a principal generator of indigenous urban texture and identity. The first part of the seminar focuses on the evolution of the New York City fabric through a series of lectures. The second part is organized around student presentations of case studies comparing several large cities in relation to their characteristic fabric types.

A6832	Urban Design Seminar IIB	3 pts
Connard	The Prefiguration of Contemporary Urban Form	

The seminar introduces the notion of urban form coding as a method of both articulating the culture of urban form and of conceiving growth strategies. The question of zoning is explored, beyond the explicit goals of regulating and controlling land-use functions or as a means of enhancing real estate values. The course is intended to introduce the student to a range of land-use tools, and also to encourage a critical inquiry into the ends served by these tools, and the skills needed to effectively participate in discussions regarding these regulatory frameworks. Students are encouraged to develop the cross-disciplinary skills that can be applied in the practice of urban design, and to consider whether the skills typical of architecture, planning, or urban design are suited to these challenges.

A6838	Urban Design Seminar IIIA	3 pts
The Staff	Urban Design Competitions-Constructing Urbanisms	

The design competition is the vehicle for exploring the contours of contemporary urban

design discourse and practice. This seminar examines urban design competitions as a source of “field formation.” By closely studying how competitions frame design challenges, delineate sites, structure juries, and assess submissions, specific insights are gleaned about contemporary attitudes toward urban design.

A4688	Urban Design Seminar IIIB	3 pts
Shane	Public Space and Recombinant Urbanism	

This seminar examines how cities grow, developing public space and density, followed by possibly declining or switching to a lower-density regional city model over time. The emphasis is on the rules that generated the initial growth and on how they are transformed in later iterations, innovations, or repetitions. A major focus is on the relations between the public spaces in different growth patterns in the city and the changing relations between them.

MASTER OF SCIENCE IN CRITICAL, CURATORIAL, AND CONCEPTUAL PRACTICES IN ARCHITECTURE (MSCCCP)

DIRECTOR: Felicity D. Scott + Mark Wasiuta

THE PROGRAM

The Masters of Science in Critical, Curatorial, and Conceptual Practices in Architecture (CCCPArch) is designed to offer advanced training in the fields of architectural criticism, publishing, curating, exhibiting, writing, and research through a two-year, full-time course of intensive academic study and independent research. The program recognizes that architectural production is multi-faceted and that careers in architecture often extend beyond traditional modes of professional practice and academic scholarship, while at the same time reflecting and building upon them. The CCCPArch program includes a mixture of required core classes, elective lectures, and seminars, and it culminates in the preparation of an independent thesis under the supervision of an advisor from the Graduate School of Architecture, Planning and Preservation (GSAPP). This could take the form of a written thesis or other sustained demonstration of rigorous, original research or it could involve the conceptualization, design, and even production of an exhibition, publication, or detailed prospectus thereof. The GSAPP faculty is unparalleled in offering a wide-range of expertise in the history, theory, and criticism of architecture, urban design, landscape, preservation, and spatial politics as well as in the conceptualization and production of publications and exhibitions. The CCCPArch program's emphasis is on forging new critical, theoretical, and historical tools, and producing new concepts and strategies for researching, displaying, and disseminating modern and contemporary architecture and closely related fields. The program is aimed at those with a background in architecture who wish to advance and expand their critical and research skills in order to pursue professional and leadership careers as architectural critics, theorists, journalists, historians, editors, publishers, curators, gallerists, teachers, and research-based practitioners. Applicants might be seeking further academic training or specialization after a professional degree or years of teaching, or even at mid-career. They might also have worked in a related field and be seeking an academic forum to develop additional specializations in architecture. The program also provides the highest level of preparatory training for application to Ph.D. programs in architectural history and theory.

ADMISSIONS

Applications are due January 15. All applicants for admission to the program must have a minimum of a four year bachelor degree or equivalent, including no less than 4 classes in architecture, architectural history, or a related form of aesthetic or cultural practice. Applicants who do not hold a B.Arch or M.Arch degree or the equivalent should demonstrate a substantive interest in architecture and/or urbanism through providing evidence of work in either history, theory, criticism, research, design, or curatorial practice. This can take the form of written documents or a visual portfolio. Visual acuity and interest in undertaking independent research and original projects are crucial for all applicants and submission of a portfolio of writing or visual material is strongly encouraged. The portfolio should not exceed 8.51 by 11 inches, should not measure more than .5 inch in thickness, and should be submitted with the application. The portfolio will be returned by mail only if sufficient postage and packaging are included and if the return address is indicated on the portfolio. Submission of a CV is also optional with the application. Applicants for this program enter in the fall term; they must attend on a full-time basis for four consecutive semesters.

DEGREE REQUIREMENTS

The M.S. degree requires 48 points of credit (10, three point classes plus the completion of two semesters of 9 credit M.S. thesis). Students must enroll in 12 points min. each semester. Coursework Required courses: In their first year, students are required to take both semesters of the specialized CCCPArch Colloquium. The Fall Colloquium addresses the critical formulation, history, and legacy of a range of seminal architectural writings, publications, conferences, and exhibitions as well as investigating their institutional, social, and political context. The Spring Colloquium is an advanced methods course focused on contemporary modes of theoretical, critical, and historical research and scholarship and their relation to practice. Its primary aim is to provide students with an understanding of the contemporary state of the discipline of architecture and its modes of interrogation as well as with further intellectual tools through which to situate their own research. While both colloquia are under the direction of an individual faculty member, they may also include guest speakers addressing aspects of their own practice. Together these colloquia provide a focused forum for the critical examination of a range of architectural practices and debates and for ongoing discussion regarding the students' own development of strategies of research, writing, publication, and exhibition. In the second year students are required to enroll in CCCPArch Thesis I (Research) in the Fall and CCCPArch Thesis II (Writing/Production) in the Spring. These are the

primary forums for development of and feedback on the students' independent research and are under the direction of a primary advisor, with whom students should meet at regular intervals during both semesters to discuss progress on their work. Elective courses: In addition to required classes, students take a mixture of lecture and seminar courses offered by the GSAPP. Students who do not have extensive background in architecture may be advised or even required to enroll in specific lecture classes. Up to two elective classes can be taken in departments outside the GSAPP and up to two can be taken as independent studies. Electives can also be satisfied by working on a project with the Department of Publications or Department of Exhibitions, with the Temple Hoyne Buell Center for American Architecture, or with one of the many Labs and Experimental Units at the GSAPP, subject to project approval both by those directors and the director of the CCCPArch program. Of the ten courses required to complete the degree, students usually complete eight courses in the first year, including the two colloquia, four seminars, and two lectures. The second year typically includes two additional elective courses, either lectures or seminars, in addition to registering for the two CCCPArch Thesis courses. Thesis The thesis is typically undertaken under the supervision of a GSAPP faculty member. In special cases, and subject to approval by the program director, a student's thesis can be supervised by an appropriate outside specialist relevant to their project, such as a curator or editor. Second year students make a presentation of their thesis research to GSAPP faculty and invited guests at the end of the Fall semester and defend their Thesis in a public review format at the end of the Spring semester.

TYPICAL COURSE OF STUDY

TERM 1 (FALL)

A4032	CCCP ARCH COLLOQUIUM I : OPERAING PLATFORMS	3 pts
	ELECTIVE LECTURE	3 pts
	ELECTIVE SEMINAR	3 pts
	ELECTIVE SEMINAR	3 pts
	TOTAL	12 pts

TERM 2 (SPRING)

A4033	CCCP ARCH COLLOQUIUM II : CONTEMPORARY CRITICAL DISCOURSE	3 pts
	ELECTIVE LECTURE	3 pts
	ELECTIVE SEMINAR	3 pts
	ELECTIVE SEMINAR	3 pts
	TOTAL	12 pts

TERM 3 (FALL)

A4040	CCCP ARCH THESIS I	9 pts
	ELECTIVE SEMINAR	3 pts
	TOTAL	12 pts

TERM 4 (SPRING)

A4041	CCCP ARCH THESIS II	9 pts
	ELECTIVE SEMINAR	3 pts
	TOTAL	12 pts

Total: 48 pts

RESOURCES

Students are able to draw on the remarkable faculty, research, publication, public programming, and exhibition resources at the Graduate School of Architecture, Planning and Preservation. The Avery Library is one of the premier architectural libraries in the world and the Arthur Ross Architecture Gallery has been forging an important paradigm of archive-based exhibitions under the school's "Living Archiveâ?" project. Other primary resources include the Department of Publications, the Temple Hoyne Buell Center for the Study of American Architecture, and the many Labs and Experimental Units associated with the school that are working in fields as diverse as experimental publication, spatial information design, responsive systems, infrastructure and poverty action, landscape,

networks, memory, and more. Students are expected to take advantage of the extensive programs of lectures, panel discussions, symposia, exhibitions, and other events that form a key part of the curriculum at the school. Visiting workshops will also be led by leading practitioners in the fields of the publication, criticism, and exhibition of architecture, urbanism, and landscape. In addition to course offerings at the GSAPP, students are able to enroll in classes in other parts of the university including the Graduate School of Arts and Sciences, the School of the Arts, and the School of International and Public Affairs, subject to approval by the professor. There are, for instance, many opportunities for collaborative exchange with the M.A. in Modern Art: Curatorial Studies Program of the Department of Art History and Archaeology. Other schools also have extensive public programs. Beyond this, New York City offers unequalled resources for the study of architecture, museums, galleries, and the urban environment, including: the Museum of Modern Art (MoMA), The Storefront for Art and Architecture, The Van Alen Institute, Artists Space, Max Protetch Gallery, Common Room, Ludlow 38, the Center for Urban Pedagogy, The Architects Newspaper, and other museums, galleries, and publishing houses in New York. The GSAPP also has close relations with a national and international network of affiliated museums, galleries and publications including the Canadian Center for Architecture (CCA) in Montreal, Centres Georges Pompidou in Paris, The Center for Land Use Interpretation in Los Angles, San Francisco Museum of Modern Art, ACTAR Editorial, Domus, Abitare, and others.

OTHER

This is a non-professional degree, and does not satisfy requirements for the professional licensing exam.

THE PH.D. PROGRAM IN ARCHITECTURE (HISTORY AND THEORY)

DIRECTOR: Reinhold Martin

Ph.D. Committee: Barry Bergdoll (Art History)
Kenneth Frampton
Mary McLeod
Gwendolyn Wright

Associated Faculty: Reinhold Martin
Mark Wigley

THE PROGRAM

The doctoral program addresses the development of modern architectural form and ideas as they have been affected by social, economic, and technological change. In broad terms it encompasses the relations between the profession, practice, civil institutions, and the society at large. The main focus of the program is the history and theory of modern architecture and urbanism from 1850 to the present. We are especially seeking students interested in avant-garde and post-avant-garde developments, the history of American architecture and urbanism, the evolution of colonial and postcolonial architecture, and the cultural impact of modernization in Europe. The program concentrates on architectural production of the past fifty years and, in particular, on the evolution of contemporary architectural theory and practice. The program is administered by a committee of faculty from the Graduate School of Architecture, Planning, and Preservation and the Department of Art History and Archaeology.

ADMISSIONS

This program has been designed to meet the needs of academically trained M.Arch. graduates. Under exceptional circumstances candidates who hold a five-year professional degree or a master's degree in other fields are considered for admission. The acceptance of non-architecture candidates is contingent, however, upon completion of a design studio in architecture. At the time of registration, all students are expected to have graduate-level fluency in English, both in terms of writing and general discourse. Any necessary remediation should be undertaken prior to enrollment. Because much of the textual material is in languages other than English, candidates must also have reading ability in one of the following foreign languages: French, German, Italian, or Spanish. Similar competency must be attained in a second foreign language drawn either from the above group or in relation to the student's area of specialization. It is

recommended this language requirement be fulfilled within the first year of the M.Phil. course. The Ph.D. program is part of the Graduate School of Arts and Sciences. Application forms should be requested from the Office of Admissions, Graduate School of Arts and Sciences, Columbia University, 107 Low Memorial Library, Mail Code 4304, 535 West 116th Street, New York, NY 10027. Applications are due January 1.

ORGANIZATION OF THE PROGRAM

Students are required to spend four semesters in residence during which time they are expected to take thirteen courses (39 credit points), of which eight must be taken for a letter grade. The required academic course work breaks down into the three sections described below. In addition to the doctoral colloquia, five classes should be seminars. It is assumed that these courses will be spread out evenly over the first four semesters of study.

For any course in which a student receives an incomplete, he or she must complete all outstanding course work before the beginning of the next academic year. Those who do not meet these terms will be required to take a leave of absence at their own expense to finish all necessary course work.

At least once each semester students should meet individually with the director of the program and with their adviser. Students are free to change their advisers during the course of their studies.

Section 1: Doctoral Colloquia

All students are required to take four doctoral colloquia over the four-semester sequence. Three of these must be taken for a letter grade.

Section 2: Architectural History/Theory

Students will be required to take at least one course from the following areas of study:

1. Pre-1750 (Western or non-Western)
2. Eighteenth-Century Architecture and Theory
3. Nineteenth-Century Architecture and Theory

These requirements may be modified for students who have had graduate-level courses.

Section 3: Social and Critical Studies

Students should take at least one course outside of Architecture and Art History. Representative departments in the Graduate School of Arts and Sciences with an emphasis on comparative historical and critical studies include: English and Comparative Literature, Germanic Language and Literature, Philosophy, History, Political Science,

Anthropology, and Urban Planning. The specific topic and the choice of faculty will be decided in consultation with the student's adviser. M.Phil.

M. PHIL EXAMINATION

The four-semester program has been designed to give doctoral candidates sufficient training for the M.Phil. examination, with a special emphasis on the ability to teach classes in modern architectural and urban development and its relationship to parallel developments in material history and contemporary thought.

The M.Phil. qualifying examination is divided into three interrelated sections:

1. Three revised course work papers;
2. Three essays written in response to specific questions formulated by the examining committee, two pertaining to the major field and one to the minor field;
3. The oral examination.

The qualifying exam will be divided into major and minor fields. These fields are to be determined in consultation with the program faculty. The major field should be fairly broad and involve cross-cultural comparisons and/or cover at least a century in time, for instance:

1. France, Germany, Italy 1900-1945
2. American Architecture and European Parallels 1850-present
3. Twentieth Century Japanese Architecture and International Modernism.
4. The minor field should focus on another topic, historical or theoretical in character, distinct from the major field.

The examining committee will typically be comprised of three members, two covering the major field and one covering the minor field. In general, at least two members of the examining committee should be drawn from the Ph.D. committee or from the associated faculty. Each student prepares bibliographies in consultation with these faculty. The first part of the exam consists of three essay questions based on these bibliographies. Each member of the committee will be responsible for one question. The papers are to be completed in a three-week period and submitted at least two weeks prior to the oral examination.

PH.D. DISSERTATION

After successfully completing the qualifying examination, each student defends his or her dissertation proposal before a faculty committee, typically composed of the student's

thesis adviser and two other readers, at least one of whom should be from the Ph.D. committee or associated faculty.

The student will then be free to pursue his or her research topic independently, in ongoing consultation with the thesis adviser. It is expected that the dissertation be completed approximately two years after the approval of the topic.

The dissertation must be submitted four weeks before the dissertation defense. A copy is to be provided for each member of the examining committee. This committee ordinarily consists of five people, at least three of whom are drawn from the Ph.D. committee or the associated faculty. One member of the committee must be from outside the GSAPP.

MASTER OF SCIENCE DEGREE IN URBAN PLANNING (MSUP)

DIRECTOR: Dr. Lance Freeman

THE PROGRAM

The Urban Planning Program has as its mission the education of individuals in the (1) fundamental economic and political processes that shape the built environment of cities, (2) ways in which governments, community-based organizations, private sector actors, and political mobilizations produce and influence these processes, and (3) crafting of collective efforts to improve the quality of life of city residents. The tensions among market forces, civil society, and the goals of planning are of major concern. Particular attention is given to the importance of expert knowledge and the quest for social justice. In pursuit of these goals, the program focuses on the ideas and techniques developed by planners and social activists since the emergence of the planning profession in the early twentieth century. To this, the faculty adds knowledge from the social sciences, architecture and urban design, historic preservation, and the humanities. Columbia University's Urban Planning faculty consists of leading national and international scholars who conduct research in the field of planning as well as highly regarded practicing professionals who connect students to practical issues and perspectives. Recent faculty research has focused on gentrification in Africa-American neighborhoods of New York City, slum dwellers in African cities, minority small business development, office building conversion in Lower Manhattan, informal sector work and gender relations in India, and planning for the World Trade Center rebuilding. The faculty has broad interests that range from water and sanitation in Calcutta and social housing in Germany to affordable housing and the problems of low-wage immigrants in New York City to the rebuilding of neighborhood economies in New Orleans. Throughout the curriculum, the emphasis is on real-world problems and how planners can act to improve the lives of urban residents. In doing so, the program takes the cities of the world as its laboratory. With the program located in New York City, one of the global centers of international commerce and culture and a city experiencing population growth, the faculty looks to the city's planning issues for studios and classroom examples, while students often find their thesis topics there. Still, the problems of cities-whether they be London or Sao Paulo, Las Vegas or Nairobi-can be understood only in a global context. By the end of their time in the program, students are competent to analyze issues, develop plans, and advise policymakers on the important issues related to the growth and development of cities. They do so with the intent of making cities more just, more equitable, and more prosperous.

ADMISSIONS

Applications are due January 15th. The master's program prepares students from diverse academic backgrounds for careers as professional planners. Applicants typically, but not exclusively, have majored in architecture, engineering, sociology, political science, geography, economics, or urban studies; many also come from backgrounds in the humanities and pure sciences.

The admissions committee reviews all applicants comprehensively, considering their undergraduate academic achievements, personal statement, and related experiences. All applicants are required to take the Aptitude Test of the Graduate Record Examination (GRE). Information may be obtained from the Graduate Record Examination, Educational Testing Service, Box 955, Princeton, NJ 08540 (Web site: www.gre.org/atglance.html). Admissions decisions are made blind of the need for financial assistance.

PROGRAM ORGANIZATION AND REQUIREMENTS

The faculty shares a core pedagogical belief that the best professional education takes place in an environment of learning by doing, reinforced by classroom work and group projects. Planners must have a thorough understanding of the economic, social, political, and physical forces that shape the built environment. These beliefs are implemented through program offerings that include familiarity with the range of analytic and research techniques used by planners, a semester-long studio project, and courses in planning history and theory. Formal education is supplemented with varied extracurricular activities, which students are encouraged to attend. Evening guest lectures, faculty-led walking tours, the student newsletter URBAN, and student government meetings are some of the activities that enrich the graduate school experience and create a dynamic educational setting. Students are required to complete 60 points for the M.S. in Urban Planning: 33 points in ten required courses and 27 points between courses in a sector specialization and electives of their own choosing. Students select a sector of specialization during their first year of study. A minimum of three courses must be taken within a sector to fulfill the sector specialization requirement. A student interested in concentrating in a sector not listed below may construct his or her own specialization, subject to the approval of the planning faculty. Five sectors are regularly offered in the Urban Planning Program: Housing; International Comparative Planning; Physical Planning and Infrastructure Development; Urban Economic Development; and Environmental Planning. Students may take courses offered elsewhere in the University to fulfill some or all of their sector and elective requirements. The program maintains and continually updates listings of courses throughout the University that might be of interest to our students. Each student is required to write a master's thesis during his or her second year of study.

DUAL DEGREE PROGRAMS

For dual degree options in the Urban Planning Program, please consult the Dual Degree Programs section of this bulletin.

PROGRAM REQUIREMENTS

The M.S. degree in Urban Planning requires 60 points in the following curriculum.

TERM 1 (FALL)

Pla4208	PLANNING TECHNIQUES	3 pts
Pla4008	PLANNING HISTORY AND THEORY	3 pts
Pla4151	ECONOMICS FOR PLANNERS	3 pts
Pla6052	PLANNING LAW (TAKE FALL OR SPRING 1ST YEAR)	3 pts
Pla4577	INTRO TO GIS (TAKE FALL OR SPRING 1ST YEAR)	3 pts
TOTAL		15 pts

TERM 2 (SPRING)

Pla6911	PLANNING STUDIO	6 pts
Pla6052	PLANNING LAW (TAKE FALL OR SPRING 1ST YEAR)	3 pts
Pla4577	INTRO TO GIS (TAKE FALL OR SPRING 1ST YEAR)	3 pts
ELECTIVE OR SECTOR SPECIALIZATION		3 - 6 pts
TOTAL		15 pts

TERM 3 (FALL)

Pla6918	THESIS I	3 pts
ELECTIVE OR SECTOR SPECIALIZATION		3 pts
ELECTIVE OR SECTOR SPECIALIZATION		3 pts

ELECTIVE OR SECTOR SPECIALIZATION	3 pts
ELECTIVE OR SECTOR SPECIALIZATION	3 pts
TOTAL	15 pts

TERM 4 (SPRING)

Pla6919 THESIS II	3 pts
ELECTIVE OR SECTOR SPECIALIZATION	3 pts
ELECTIVE OR SECTOR SPECIALIZATION	3 pts
ELECTIVE OR SECTOR SPECIALIZATION	3 pts
ELECTIVE OR SECTOR SPECIALIZATION	3 pts
TOTAL	15 pts

Courses of Instruction

Pla4008	Planning History & Theory	3 pts
Irazabal		

A lecture course focused upon the historic emergence of the contemporary practice of urban planning. Beginning with the birth of the industrial city in the 19th century, the course takes its subject matter from early planning attempts such as tenement house regulation and garden cities up to contemporary concerns with postmodernism, new urbanism, and sustainable development. The course focuses principally upon the American experience but also draws from Western Europe.

Pla4151	Economics for Planners	3 pts
Adler		

Reviews the basic concepts and methods of urban economics, with a major emphasis on location and land-use economics. Examination of both equilibrium-based models and the new critical models derived from analyses of the production process and spatial

organization. Formal background in economics is not required.

Pla4208 Planning Methods I 3 pts
King

This is an introductory course designed to help prepare students for original data collection and common analysis methods used in planning research and practice. Common methods of analysis are covered using publicly available data sets and data collected through assignments. Through weekly readings, lectures and lab sessions students will gain a basic understanding of the tools and methods required in planning practice.

Pla4226 Presentation as Strategic Planning Tool 3 pts
Kahn

This seminar explores the strategic dimensions of a basic element of planning and design practice: preparing and delivering public presentations. It covers all phases of the process, from initial goal articulation, to identification and development of content relevant structure, formatting and oral delivery. Over the term, students engage presentation on a communicative level, as a means of argumentation, an educational instrument, and form of public advocacy.

Pla4304 Introduction to Housing 3 pts
Freeman

This course or the equivalent is prerequisite to other courses in housing and community development. A fundamental understanding of housing in its social and economic aspects. Emphasis on the nature of the housing problem, the dynamics of the housing market, the history and current status of government attempts at intervention in the market, and housing's place in resolving the major public issues of poverty, segregation, and urban growth and decay. Theory and analytic method are stressed.

Pla4340 Sustainable Zoning & Land Use Regulation 3 pts
Martin

Introduces the basic techniques of land use regulation as practiced in the United States today with an emphasis on regulations that support green building practices and promote sustainable development patterns. Attention is given to the history, development and incidence of a variety of land use regulations, from the general (or comprehensive) plan to advanced techniques including growth management and recent sustainable zoning practices.

Pla4387	Privatization, Private/Public Partnership and Efficiency	3 pts
Adler		

Until the 20th century all government services had to be privatized and today public/private partnership are ubiquitous. They include “public spaces,” the conservancies of the different parks, and Business Improvement Districts. In 2011 New York City issued a call for proposals on how to privatize its street parking. Privatization and public/private partnerships raise questions both about the proper role and obligations of government, and about when public or private production is the better method for the government to use to fulfill these obligations. The course covers the main theories that planners rely on in order to choose between the different forms of service provision, and examines selected cases in light of these theories.

Pla4501	Local Economic Development Planning	3 pts
Sutton		

A fundamental feature of this graduate seminar is to enhance critical thinking skills with regard to economic development concerns. In other words, we will routinely reflect on the underlying assumptions about the public good; distribution of benefits and burdens; the market, the state and civic institutions, among other tacit and explicit assumptions. Another fundamental feature of this seminar is to enhance analytic skills necessary for good/fair/just planning, argumentation and decision-making. Consequently, this seminar examines both local economic development (LED) theories and methodologies, and illuminates the underlying politics of LED decision-making.

Pla4518	Metropolitan + Regional Development	3 pts
Lapp		

With much media coverage of the problems associated with urban sprawl, planners on all levels must deal with the implications of modern development patterns. This course examines planning for decentralized metropolitan regions and edge cities, including preservation of community and environmental systems, infrastructure and transportation planning, and the public and private institutions needed to implement plans.

Pla4577	Intro to GIS	3 pts
The Staff		

Geographic Information Systems (GIS) are tools for managing, describing, analyzing, and presenting, information about the relationships between where features are (location, size and shape) and what they are like (descriptive information known as attribute data). Because its techniques allow one to represent social and environmental data as a map, GIS has become an important tool across a variety of fields including planning, architecture, engineering, public health, environmental science, epidemiology,

and business. Further, GIS has become an important political instrument allowing communities and regions to (geo)graphically tell their stories. GIS is a powerful tool, and this course is meant to introduce students to the basics. Because GIS can be applied to many research fields, this class is meant to give students an understanding of its possibilities along with the capabilities to begin engaging those possibilities.

Pla4579 Introduction to Environmental Planning 3 pts
Marcotullio

The goal of this course is to provide an introduction to the ideas and information necessary to integrate environmental viability and sustainable development with other primary concerns of urban planners, namely, equity, healthy communities, and economic development. These topics are discussed in terms of two practice areas: environmental management (policy and regulatory decisions) and environmental planning (including land-use planning and facility siting). The focus is on providing an overview of the major concepts, actors, methods, and policies used in the decision-making context, while emphasizing practical considerations and local examples.

Pla6052 Planning Law 3 pts
Scherer

The constitutional and other legal bases for various land-use controls are studied through judicial decisions. The common law tradition; the police power, taxing power, power of eminent domain; and limitations imposed by the First, Fifth, and Fourteenth Amendments are covered. The approach of lawyers and courts, as differentiated from that of planners, is considered.

Pla6205 Transnational Planning 3 pts
Irazabal

Pla6216 NYC Land Use Approvals 3 pts
Gothelf

Pla6233 Civic Hacking: New Tools for 3 pt
Bullen Participatory Planning

Civic Hacking is not necessarily contained to the digital realm. As future planners, architects, urban designers, public health professionals, public administrators or even simply engaged citizens, you will be part of bringing together the world of technology with urban spaces and designing new tools for community participation in the planning process. With your communities as your users, we will focus on using the Human-Centered Design (HCD) process in developing our ideas for these new tools. This

workshop class will explore the tools available for civic hacking in real life applications and focus on using the human-centered design process to change the future of participatory planning.

Pla6330 Site Planning and Support 3 pts
Trelstad Systems for Development

A comprehensive review of all design and infrastructure issues involved in land development, including circulation, utilities, site subdivision, and zoning. Covers basic engineering principles and planning considerations for development projects.

Pla6346 Planning in Emerging Economies 3 pts
Xin Li

This course focuses on contemporary urban challenges faced by emerging economies as part of the interconnected world economy and society. These challenges range from increasing competition for economic growth among developing countries and between developed and developing countries, to environmental protection versus economic development, land reform and slum upgrading in the process of urban renewal, rising conflicts over land use and property rights, transportation related to the control of car ownership, and the rising power of civil society. Students will have the opportunity to develop a comparative perspective on how countries with different institutional settings deal with similar urban planning problems.

Pla6434 Intro to Transportation Planning 3 pts
Lapp

Introduction and overview of transportation modes, the characteristics of travel, trip making, transportation planning policies and procedures, and their effect on the location, development, quality of life, and economic development of urban places and their surrounding metropolitan areas. The trip generating characteristics of various land uses are discussed including their quantity, type, temporal differences, and how they are accommodated by automobiles, mass transit, bicycles, walking, as well as goods and freight movement. Case studies with their component analyses, techniques, and methodologies such as trip generation, modal splits, traffic assignments, volume/capacity concepts, and parking standards are the core of the course.

Pla6605 Developing Urban Informality 3 pts
De Castro Mazarro

This seminar will portray a historical sequence of urban planning and design programs, and architectural projects developed at precarious settlements. The seminar will propose

the policies and programs include eviction laws sequence as suitable to encompass the physical and social nature of informal settlements. Also, it will link the history of urban planning with real estate, politics, and migration events to question the characterization of definitions such as "informality," "housing deficit," "sub-standard living," or "slums." The seminar aims to build a thread of historical precedents that link urban informality with mainstream urban planning and design history; and seeks defining the role of spatial strategies in proposing accurate solutions to urban poverty and inequality.

Pla6607 Environment, Climate Change, and our
Marcela Tovar-Restrepo New “Normal” 3 pts

Pla6609 Territorial Imperative: Twentieth Century 3 pts
David Smiley New Towns

The project and work for the class will be documentary and curatorial, a Guide, the organization and shape of which will be part of the emergent seminar work. This New Town Guide will test the feasibility of graphic conventions to understand the New Town; it will facilitate their comparative and detailed analysis – as well as less-tangible, qualitative interpretations. The study of plans and sections, demographics, employment and uses, scale and size, infrastructure and movement, regions and siting, policy, governance and planning frameworks will allow us to understand more precisely the means – and, perhaps, the ends – of the territorial imperative.

Pla6909 Advanced Urban Planning Studio: After Sandy 6 pts
Ethel Sheffer

Pla6918-6919 Thesis, I and II 3 pts
King & Staff

Objective is to guide students through the final stages of thesis preparation and defense, through reviews by peers, faculty members, and practicing professionals, to assist in presenting and synthesizing research findings. (Planning A6850 and A6918 together constitute the master's thesis requirement.)

Pla6925-A6926 Advanced research, I and II 3 pts The Staff

Either term may be taken separately. Prerequisites: a project outline and the written permission of a faculty project supervisor. Individual or small-group independent research in consultation with a faculty member in areas of the student's choice. Students are responsible for planning and conducting research activities and enlisting

the cooperation of a faculty adviser.

ELECTIVES AND SECTOR OF SPECIALIZATION COURSES

Courses fulfilling the sector requirement are marked as follows: (H)-Housing; (I)-International; (E)-Urban Economic Development; and (P)-Physical Planning; (EN)-Environmental Planning.

THE PH.D. PROGRAM IN URBAN PLANNING

DIRECTOR: Dr. Robert Beauregard

THE PROGRAM

The Ph.D. Program prepares students for careers in teaching, research, and policy in the field of urban planning. In consultation with faculty, students develop individual study programs anchored in advanced knowledge concerning the socioeconomic, political, and environmental processes that shape cities and regions, and the quality of life within them. Organizing this inquiry are questions related to the effectiveness, efficiency, and equity of collective interventions. These questions are framed by considerations of social and spatial justice and the development of sophisticated theoretical and methodological skills.

ADMISSIONS

Applications are due January 1. An applicant is expected to hold a master's degree in urban planning or in a related discipline and have excellent academic credentials, with a grade average of B+ or better. In addition, an applicant is required to have completed at least 90 points of undergraduate liberal arts courses in the social sciences, humanities, or natural sciences, and the core courses provided in the master's level curriculum in the Urban Planning Program at the School. The Ph.D. Program is part of the Graduate School of Arts and Sciences (GSAS). Application forms can be obtained on the GSAS Web site. The Web site also contains information on the rules and regulations governing the Ph.D. Program. Organization of the Program Each student is expected to acquire advanced knowledge in the following areas:

1. History and Theory of Planning
2. Urban and Regional Development
3. Research Methods in Planning
4. Sector Specialization
5. Related Discipline or Field

At the center of the Ph.D. curriculum are two seminars on planning theory and planning history along with four colloquia that deal with specific issues within planning thought. In general, these core courses draw on advanced knowledge in theories of planning, theories of state and collective decision-making and action, and theories of urban form and development. Befitting the nature of the planning project, knowledge from various social science disciplines, architecture and urban design, the humanities, and even natural sciences is brought to bear on key ideas and arguments within the field.

Students are also required to take at least two courses in advanced methods. These can include courses in research design, advanced statistics, epistemology, and specific data collection procedures (e.g., ethnography, survey design). As for the sector, the student is expected to take one or more advanced seminars in a specialized planning field such as housing, urban land markets, environmental planning, or international development. Lastly, the program requires all Ph.D. students to develop an outside field consisting of at least three courses. This could include such well-defined “fields” as organization theory, real estate finance, international trade policy, urban politics, or twentieth-century American urban history.

COMPREHENSIVE EXAMINATIONS

Comprehensive examinations are taken in history and theory of planning and in the sector specialization. These are written exams read by a committee of the Doctoral Program Subcommittee in Urban Planning. Students must pass these exams before they can present and defend their dissertation proposal. The exams are normally taken at the conclusion of course work. M.Phil.

EXAMINATION REQUIREMENT

Any student who has satisfactorily passed the comprehensive examinations and has earned six residence units will be awarded the M.Phil. degree. Dissertation proposals must be approved by the sponsor and are presented and defended in front of at least three members of the Ph.D. Program Steering Committee, including or in addition to the sponsor. Completed dissertations must be approved by the sponsor before they can be defended in front of a dissertation committee.

PROGRAM REQUIREMENTS HISTORY AND THEORY OF PLANNING

Each student is required to complete a minimum of two courses in the history and theory of planning, the advanced seminars in planning history and theory. Among the topics covered are the genesis and structure of planning thought and methods; economic, political, and social factors influencing the development of planning theories and policies; the theory and development of urban structures; and the history of cities.

DOCTORAL RESEARCH COLLOQUIUM

This is a required four-semester course. It focuses on new developments in the social science and planning literature. Research Methods in Planning Each doctoral student is expected to demonstrate competence in statistical research methods as well as in research methods relevant to the topic of his or her dissertation. This requirement is intended to develop the social science, planning, and evaluation skills expected of a planning scholar. At least two courses in advanced methods, either from within or outside the program, are needed to fulfill this requirement.

SECTOR SPECIALIZATION

Sector specializations provide students with the substantive backgrounds for their individual scholarly interests. The following list of typical fields is intended to be suggestive, not exclusive: Planning History and Theory Urban Spatial Theory Economic Development Physical Planning Transportation Housing Community Development Comparative Planning Related Discipline or Outside Field This requirement helps students relate their urban planning interests to a broader field of intellectual inquiry. It is normally met by the completion of a minimum of three courses in the area chosen or by previous work. In either case, a letter from a University faculty member expert in that area attesting to the completion of the requirement is needed. The following are examples of related disciplines and outside fields: anthropology, art history, economics, geography, history, law, political science, public health, social work, sociology, historic preservation, urban design, and international affairs.

DEGREE REQUIREMENTS

EXAMINATIONS

Required comprehensive examinations typically will be offered at the end or the beginning of the fall or spring term. They will be graded (Pass with Distinction/Pass/Fail) by the Ph.D. Examination Committee. No examination can be taken while Incompletes in that area are outstanding. The Examination Committee will comment in writing to the student on his or her written responses after each examination, and those comments will be included in the student's file. If the committee determines that the student has not satisfactorily passed, the student will be eligible for reexamination, but not more than once for each examination. Course Credits and Grades Students may earn either Examination Credit (E credit) or Registration Credit (R credit). E credit is granted after regular evaluation of a student's work in a course and is expressed as a letter grade: A (excellent), B (good), C (fair), D (poor), F (failure), or INC (incomplete). A student has one year to make up an Incomplete. After that time, the grade will automatically be changed to an R, except in the case of seminars. R credit is earned when the student attends a course without any obligation to take examinations or do other assigned work. Once awarded, the grade is not subject to change, nor may a course taken for R credit be repeated for Examination Credit. Both E and R credits are entered on a student's permanent record and are counted toward residence requirements. A student may also audit courses, with the approval of the instructor, but without receiving any credit. The Graduate School of Architecture, Planning, and Preservation uses a Pass/Fail/Incomplete grading system. Ph.D. students, however, must receive letter grades.

Note: No more than 15 of the 75 points of required work can be taken for R credit-or 9 out of 45 points if 30 points of advanced standing have been granted, or 12 out of 60 points if 15 points of advanced standing have been granted.

LANGUAGES

No general language requirement is imposed on students in the Ph.D. Program. The literature in the field relevant to the work of planning students concentrating on areas within the United States today is, by and large, available in English; knowledge of additional languages is professionally necessary only for students in certain areas of specialization. At the time of the first meeting of the student's Ph.D. Committee, and again at the committee meeting with the student to review the Ph.D. dissertation proposal, a determination will be made whether such a requirement is appropriate. For example, it is anticipated that a student taking as a sectoral specialization urban planning in less-developed countries, or one writing a comparative international study of planning, will require a mastery of foreign languages appropriate to the particular interest. Where such knowledge is required, proficiency must be established to the satisfaction of the director of the doctoral program.

TIME LIMIT AND EXTENDED RESIDENCE

A student must complete all requirements for the Ph.D. degree within seven years after initial registration, or within six years if awarded advanced standing of two Residence Units. Rare exceptions to this rule are recommended by the program and granted by the dean of the Graduate School of Arts and Sciences. A student who has satisfied the minimum residence requirements is eligible to enroll for Extended Residence at a reduced fee. This applies to any term in which a student has yet to complete either coursework, language requirement, qualifying examinations, or the defense of the dissertation. Exception is made for students defending a dissertation if they were registered for either a Residence Unit or Extended Residence in the term immediately preceding the defense, in which case they pay the Matriculation and Facilities fee. Students who are not completing degree requirements as described above, and who are not required to register for a Residence Unit or Extended Residence as a condition of their fellowship or University appointment, can satisfy the requirement for continuous registration and maintain their status by paying the Matriculation and Facilities fee, which allows them to make use of various University facilities.

COURSES OF INSTRUCTION

Pla8900-Pla8903	Doctoral Colloquium, I, II, III, IV	3 pts
The Staff		

Open only to Ph.D. candidates in planning or in closely related fields, this sequence of colloquiums is taken in the first and second years of the program. The intellectual organizing mechanism of the Ph.D. program, the colloquium, brings together all students at the same level within the Ph.D. program and enriches the work of defining the dissertation topic and subsequent research and writing.

Planning A8930 Sclar (Given every other year.)	Advanced Seminar in History of Planning and the City	3 pts
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Designed to satisfy one of a minimum of three courses in the history and theory of planning. Depending upon the interests of the students and instructor, the seminar delves in great detail into one or two specific themes or topics in planning history. A term paper is required.

Planning A8931 Srinivas	Advanced Seminar Planning and Social Theory	3 pts
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Designed to satisfy one of a minimum of three courses in the history and theory of planning. The genesis and structure of planning thought and methods; economic, political, and social factors influencing the development of planning theories and policies; the theory and development of urban structures; the history of cities.

MASTER OF SCIENCE DEGREE IN HISTORIC PRESERVATION (MSHP)

DIRECTOR: Dr. Andrew Dolkart

THE PROGRAM

The Columbia Master of Science in Historic Preservation, the oldest degree of its kind in the United States, trains advocates of the public interest in old architecture, landscape, and other artifacts of the human environment. Its graduates are experts in the protection and development of the value of these works of art as instruments of social disclosure and public leadership and as agents in the formation of personal and community identities—the human values that justify historic preservation's extraordinary political and legal power.

Columbia educates its practitioners in the why, what, and how of historic preservation in studio, course, and thesis work. In its training, the Columbia program benefits from its long experience in all aspects of the discipline it founded. The program's interest in the purposes of historic preservation—the “why” of it—goes back to the seminal works of its founder James Marston Fitch and his pioneering response to the felt need for preservation in the critical years of the 1960s and '70s and for a broader understanding of the social benefits of the discipline he was inventing. This exploration continues at Columbia in the on-going theoretical work of its faculty, including the work of its director Paul Spencer Byard, in the *Architecture of Additions* and other publications.

The “what” of historic preservation receives at Columbia the broadest of interpretations, from works of high art to cultural landscapes, archeological sites, and the humblest, oldest traces of ordinary life. Columbia has been among the first to acknowledge the expanding ambit of historic preservation as it takes in elements of popular culture that have increasingly defined life around the world. Columbia takes it as its special challenge to maintain the high level of theoretical and historical inquiry that enables its practitioners to understand the meaning of artifacts in their jurisdiction—the significance that will motivate and control all their preservation work. The work of the faculty here includes explorations in the theory of meaning by Jorge Otero-Pailos, an architect with a special interest in phenomenology, and the on-going work of distinguished historian Andrew Dolkart, the first James Marston Fitch Professor of Historic Preservation.

The bulk of the training of the program is devoted to the “how” that is central to practice. Columbia sees historic preservation as a creative discipline that devises and applies the broadest range of appropriate provisions for the management of inescapable change. A central part of its discipline has to do with the art of architecture and particularly the architectural paradigm of combined works, where new architecture is added to old to extend its life and makes in the process new works of substantially increased significance. In its attention to architectural design, Columbia's program benefits

particularly from its place in the School of Architecture, possibly the most innovative architectural design school in the country.

Studios and courses in preservation planning and implementation focus on the creative use of historic preservation's extraordinary legal power and the proven value of historic preservation for real estate finance and development. Columbia has a long tradition of public advocacy for historic preservation and expects its practitioners to take active roles in all aspects of public life.

The final large part of the "how" of historic preservation is the art and science of conservation. Columbia created and operates the original architectural conservation laboratory. This conservation laboratory is now in the process of recombination and expansion as the Avery Laboratory in connection with a major initiative of the GSAPP to explore the fabrication of innovative architectural materials as well as the conservation of old ones. Dr. George Wheeler, a distinguished scientist from the Metropolitan Museum of Art, now leads the program's work in conservation as its director of conservation research and education. The program benefits from the University's extraordinary array of scientific laboratories, maintaining collaborations with Engineering and numerous other faculties. The conservation curriculum includes an emerging specialty in the conservation of Modern materials and assemblies. Course work includes basic training in laboratory skills and hands-on explorations of pre-Modern and Modern buildings and sites.

The Columbia program benefits from a wide array of graduates in practice, and most importantly, from an adjunct faculty of distinguished and devoted professionals who have been pioneers in the development of all aspects of preservation planning as a discipline and in the creation and protection of the law of historic preservation. These include design architects working with additions and renovations, and planners and lawyers and laypersons practicing historic preservation. All the faculty are actively and continuously involved in projects in New York and elsewhere that give the program the continuing benefit of a direct tie to real life.

As part of its service to scholarship, teaching, and practice, the Historic Preservation Program has recently founded the discipline's first learned journal, *Future Anterior*, a publication expected to appear twice a year. The Historic Preservation Program has been a leading participant in the School's on-going initiative to explore the value of dual programs within its walls. In addition to dual degree programs with Architecture and Planning, the program established the first of these new collaborations with the Architecture Program, the pioneering Joint Advanced Architectural Design/Historic Preservation Studio, the first of its kind in the nation. The program has for years collaborated with the Planning Program, this year for the first time joining with Planning and Urban Design to consider the preservation of the cultural landscape of Brisbane, Australia. The Historic Preservation Program also maintains a postgraduate certificate for individualized study for one year for students with prior work experience.

PROGRAM REQUIREMENTS

The 60-point, two-year Columbia program requires studio and course work and the preparation and defense of a thesis. In the first year, two studios develop basic capacities, first, to understand and argue for the significance of old buildings and districts, and, second, to organize and implement preservation plans. The studios are supported by required core courses in the foundations and sector subspecialties of preservation as a discipline: design, history and theory, conservation, and planning, including the law.

The second year is devoted to advanced courses and workshops in sectors of specialization, to electives from the program, the School, and the University, and to the preparation of a thesis. Theses are expected to be substantial, publishable works of original insight, research, and argument.

The Historic Preservation Program offers subspecialization in four sectors of historic preservation work.

DESIGN SECTOR

Design concentrates on the development of skills in reading the meanings of old architecture and artifacts, understanding their public functions, and creating, presenting, and advocating programs for change. Specialized courses include the second-year Design Workshop carried out jointly with the third-year Advanced Architectural Design Studio and focused on the analysis and advocacy of proposals for the preservation and development of major modern monuments. Design workshops have addressed world monuments in Mexico City, Chandigarh, Brasilia, and Caracas. Design theses are in-depth analyses of the meanings of historic architecture, artifacts, and landscape and, for qualified students, opportunities for original design work.

HISTORY/THEORY SECTOR

The history/theory sector concentrates on the development of a thorough understanding of history as manifest in historic architecture and of the theoretical justifications of efforts to understand and preserve it. Students are exposed to the complex intellectual issues facing practitioners and asked to connect present-day work to broader patterns in the history of ideas, buildings, and environments. Seminars and courses in the program, the Architecture School, and the University engage architecture, urbanism, landscape, and related developments. History/theory theses pursue original research in the history and theory of historic preservation.

CONSERVATION SECTOR

The conservation sector concentrates on laboratory and fieldwork with traditional and innovative building materials and systems to develop resources and techniques for

the analysis, stabilization, and repair of historic buildings, artifacts, and landscapes. Columbia's conservation laboratory is continuously available for testing, teaching, and research. Fieldwork includes hands-on exploration of historic resources in New York City and elsewhere. Conservation theses propose, test, and correct new and old techniques of architectural conservation.

PLANNING SECTOR

The planning sector explores the full range of legal strategies, planning tools, and incentives available for the protection of structures, districts, and landscapes. Sector work seeks to increase the understanding of the connections between historic land development patterns and contemporary political and economic contexts. It introduces students to governmental and nongovernmental entities involved in preservation and examines current legal and policy issues.

PROGRAM REQUIREMENTS

The M.S. degree in Historic Preservation requires 60 points in the following curriculum.

TERM 1 (FALL)

A4510	STUDIO I: READING BUILDINGS	4 pts
A4124	INTRODUCTION TO ARCHITECTURAL MATERIALS	3 pts
A6740	HISTORIC PRESERVATION THEORY AND PRACTICE	3 pts
A6767	PRESERVATION PLANNING	3 pts
A4341	AMERICAN ARCHITECTURE I	3 pts
TOTAL		16 -19 pts

TERM 2 (SPRING)

A6750	STUDIO II: CURRENT ISSUES IN PRESERVATION	4 pts
A6831	CONSERVATION SCIENCE	4 pts
A4341	AMERICAN ARCHITECTURE II	3 pts
ELECTIVE OR SECTOR SPECIALIZATION		3-4 pts

ELECTIVE OR SECTOR SPECIALIZATION	3 pts
TOTAL	16 -19 pts

At the start of their second year of full-time study, students will identify a sector for concentration-conservation, design, history, or planning-and focus course work so that in the second year the student takes four courses in their chosen sector. Students will also begin the yearlong thesis.

TERM 3 (FALL)

A6790	HISTORIC PRESERVATION COLLOQUIUM	3 pts
A4124	THESIS I	1 pts
	ELECTIVE OR SECTOR SPECIALIZATION	3 pts
	ELECTIVE OR SECTOR SPECIALIZATION	3 pts
	ELECTIVE OR SECTOR SPECIALIZATION	3 pts
	TOTAL	15 - 19 pts

TERM 4 (SPRING)

A6753	THESIS II	4 pts
	ELECTIVE OR SECTOR SPECIALIZATION	3 pts
	ELECTIVE OR SECTOR SPECIALIZATION	3 pts
	ELECTIVE OR SECTOR SPECIALIZATION	3 pts
	ELECTIVE OR SECTOR SPECIALIZATION	3 pts
	TOTAL	15 - 19 pts

Additional courses as needed to fulfill sector requirements and achieve required 60 points for graduation. Required: Total 12 points (minimum) for non-conservation

students Required: Total 13 points (minimum) for conservation students * Design students are urged to take two courses in the Building Technologies sequence of the M.Arch. curriculum, for example, Architecture A4111 and A4123-Structures, I and II; or Architecture A4220 and A4221-Enclosures and environments, I and II.

ADMISSIONS

Applications are due January 15th. Applicants for admission to the M.S. degree in the Historic Preservation Program must first hold a professional degree in architecture or a bachelor's degree in art history, American studies, civil engineering, history, urban studies, or another related field. All applicants are required to take the Aptitude Test of the Graduate Record Exam (GRE). Information may be obtained from the Graduate Record Examination, Educational Testing Service, Box 955, Princeton, NJ 08540 (www.gre.org/atglance.html). Letters of recommendation and the applicant's statement of intent are also considered important parts of the application materials. Portfolios are not required, but any supplemental information in the form of drawings, photographs, articles, books, etc., is welcome to support the applicant's credentials. No submitted materials will be returned.

INTERNSHIP

Students are required to complete an internship during the summer between academic years, with a minimum of six weeks of paid work in some aspect of historic preservation. Students are responsible for securing internships but are assisted in this through the Historic Preservation Office. Internships must be approved in advance and are recognized as completed upon receipt of a letter of evaluation from the internship supervisor sent directly to the Historic Preservation Office.

PREPARATION

The program is interdisciplinary and expects all students to engage preservation in depth from the perspectives of all its sectors. A working knowledge of United States and world history is a basic foundation for the work. Students will develop an ability to read buildings through drawing and in that connection, it is required that they have a background in drawing, hand drafting, or computer-aided drafting. Course work in these areas does not need to appear on an official transcript. For those without prior experience in drafting and drawing, courses are generally available at vocational schools and community colleges. They do not carry credit toward the M.S. degree. Work will require basic computer proficiency (Word, Excel, Photoshop, PowerPoint). Studio experience will be enriched by a greater proficiency with graphic programs. Students in the conservation sector will be aided by prior experience in chemistry, biology, and earth sciences. Design sector students will generally be expected to have a professional or other degree in architecture.

REGISTRATION

Students must attend the program on a full-time basis, registering for at least 12 credit points per semester. In unusual circumstances, the dean of admissions will consider petitions for leaves of absence. All students will begin in the fall term.

OTHER RESOURCES AND OPPORTUNITIES

The Columbia program is supported by all the resources of the School of Architecture, Planning, and Preservation and of Columbia University. The program's architectural conservation lab, the nation's first, is fully equipped for contemporary analytic work. Research at Columbia is supported by the resources of the Avery Architectural and Fine Arts Library, the finest in the Western Hemisphere. Columbia studios, courses, and workshops take full advantage of its home in New York, the most important historic city in the United States.

FITCH COLLOQUIUM

Named for the founder of formal preservation education at Columbia, and in the United States, the James Marston Fitch Colloquium was begun as an annual event in 2000. In a daylong colloquium, students, alums, and guests hear speakers and engage in discussion over current issues in preservation, attempting to discover and define the leading edge of the discipline. Past topics have included "Target Architecture: The Role of Old Buildings in the Management of Global Conflict," "Authenticity and Innovation: Ideals for Design with Old Buildings," and "Drawing the Line: Are There Bounds to Preservation?"

FUTURE ANTERIOR

In 2004, Columbia's Historic Preservation Program launched Future Anterior, the first journal of preservation ideas and innovation. Solicitation and selection of articles, editing, and layout is student-led, guided by faculty member Jorge Otero-Pailos. Both first- and second-year students are welcome to participate in Future Anterior; graduates are encouraged to submit articles based upon their thesis or other professional and academic work.

HISTORIC PRESERVATION INQUIRY LECTURE SERIES

Students in the Historic Preservation Program are encouraged to participate in the department's InQuiry Lecture Series, which brings visitors from around the world to present their work. The lecture series specializes in introducing people and ideas that are outside the mainstream, or presented in the normal course of classroom work. Students take the lead in identifying lecturers and organizing their visit to campus.

KINNE TRAVEL

All second-year students are eligible for funds from the GSAPP in support of student travel to enrich their thesis. Trips are student-designed, with a faculty member as a sponsor. In recent years, Columbia Historic Preservation students have traveled under the Kinne program to Cuba, Nepal, Venezuela, Brazil, Mexico, and Venice.

COURSES OF INSTRUCTION

A4510	Preservation studio, I: Reading Buildings	4 pts
Dolkart, Bollack, & Dennis		

Preservation studio, I is the core course of the first year and revolves around the study of a section of New York City. Students begin by documenting individual buildings and move through the first semester with understanding and documenting ever-more complex elements of the built environment in the study area. Students explore buildings from the perspective of each of the sectors-conservation, design, history, and planning-under the direction of four faculty, each of whom is expert in one of the sectors. Studio work includes graphic presentations, written presentations, and oral presentations. The second semester studio builds on this work and culminates in the preparation of a Preservation Plan for the study area.

A6750	Preservation studio, II: Current Issues in Preservation	4 pts
Dennis, Mcnanney, Freeman		

Preservation studio, II continues the work of the fall semester Preservation studio, I and the same study area within New York, extending the understanding of that area from beyond its individual building components to the neighborhood and region. Issues of designing appropriate infill buildings on vacant or underutilized lots are explored in a design charette at mid-semester. Studio, II culminates in a preservation plan for the area, which evaluates the historic resources against local zoning, economic realities, physical assets and problems, and members of the study area's community, testing student ideas against neighborhood personalities and politics.

A6740	Historic Preservation Theory and Practice	3 pts
Otero-Pailos		

An overview of the history and present state of the field of architectural preservation in the Western world as a basis for professional practice in the United States. Through lectures, readings, and class discussions, the background, theories, and present challenges in the field are examined. The course is organized under headings that represent the principal

facets of the field, namely, history, theory, methodology, technology, urban issues, and professional practice. Within these headings specific subjects and disciplines such as archeology, museology, historical research, project planning, standards, legislation, and project management are addressed.

A4339	American Architecture I	3 pts
Dolkart		

Examination of the development of American architecture from the earliest European settlements to the centennial in 1876. Beginning with the earliest Spanish, French, Dutch, and English colonial architecture, we explore the American adaptation of European forms and ideas and the development of a distinctly American architecture. Lectures and readings examine high style and vernacular architecture in rural and urban environments throughout the settled parts of the United States. Supplemented with tours and the examination of original drawings and early architectural publications in Avery Library.

A4341	American Architecture II	3 pts
Otero-Pailos		

A survey of architecture built in the United States and its territories between 1876, the country's first centennial, and 1989, the end of the cold war, a date that marked America's triumph as the only world superpower. Designed to help develop competence in identifying, understanding, and analyzing historic structures, their significance, types, and styles, and to develop proficiency in the use of the methodological, historiographical, visual, and intellectual tools necessary to fully grasp the meanings of historic buildings in their various contexts.

A4124	Introduction to Architecture Materials	3 pts
Wheeler		

Structures, systems, and materials, I familiarizes students with the structures and materials of traditional building, beginning in this course with wood framing and load-bearing masonry walls. The introductory conservation course, it introduces how buildings are made, how they often fail, and what can be done about it. The organization of the course relies upon not only the study of the chronological development of the building arts and sciences, but as each building system is introduced, the discussion of the pathology modes and conservation approaches follows within the same week. Fieldtrips to see the situations discussed in class are integral to the course and occur weekly during the first half of the semester.

A6831	Structures, Systems, and Materials, II	3 pts
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Prudon

Structures, systems, and materials, II builds on information introduced in Part I and brings this material up to the present in terms of understanding modern building systems and materials. It addresses how steel frame and concrete buildings are made and how they often fail. The organization of the course relies upon not only the study of the chronological development of the building arts and sciences, but as each building system is introduced, the discussion of the pathology modes and conservation approaches follows within the same week.

A6767	Historic Preservation Planning	3 pts
Clark		

A comprehensive introduction to the field of preservation planning that examines the constitutional underpinnings of landmarks regulation and the emergence of historic preservation as a discipline analogous to urban planning. Also addressed are the issues of applying preservation planning tools, including local individual and historic district designations, National Register nominations, special zoning and conservation districts, easements, and restrictive covenants. Financial incentives for rehabilitation, including investment tax credits, property tax incentives, and revolving loan funds, are examined. Current issues in preservation planning including combating sprawl and preserving rural landscapes are addressed. Guest speakers highlight preservation in Chicago and Pittsburgh, illustrating similarities and differences in practices in the field in other American cities.

A6727	Architecture of Additions	3 pts
Byard		

An exploration of combinations of old and new architecture to understand how the new can extend the meaning of the old and how it extends that meaning when the old architecture is said to be "preserved." Additions sees combined works as one of the most challenging and illuminating of the contemporary building types, one having special relevance to almost all contemporary architectural practice.

Sector Requirements

Architecture Conservation

Messrs, Wheeler and Weiss

The three-course sequence course is designed to provide a basic understanding of building materials, to demonstrate how to identify these materials and evaluate their conditions, and to show how to generate the information and data necessary to propose and evaluate conservation treatments. All three courses are required for all students

selecting conservation as their sector of specialization. The courses are not sequential, and any student may take any course of interest without prior requirements.

**A6764 Architecture Conservation I 4 pts
(Spring)**

The format of the course is lecture, laboratory exercises, and field trips. Conservation, I examines stone, brick, terracotta, and glass.

**A6786 Architecture Conservation II 4 pts
(Fall)**

The format of the course is lecture, laboratory exercises, and field trips. Conservation, II examines concrete, mortar, stucco, and plaster.

**A6788 Architecture Conservation III 4 pts
(Spring)**

The format of the course is lecture, laboratory exercises, and field trips. Conservation, III examines wood, paint, and other finishes to wood surfaces.

**A6726 Planning Workshop: Preservation 3 pts
Sampson of Cultural Landscapes**

The Hudson River Valley has been described by the National Park Service as “the landscape that defined America.” In recent years, the valley has been named by Congress as a National Heritage Area, by President Clinton as an American Heritage River, and by New York State as the Hudson River Valley Greenway. Yet the valley continues to face great challenges to its character and historic context through the planned (and unplanned) development of cement plants, energy facilities, destruction of historic buildings, and through sprawl. This course, through readings, lectures, class dialogues, and case studies as well as field trips, examines the history of the preservation of cultural and natural landscapes and the techniques, such as regional planning, heritage tourism, and the use of conservation easements now in use nationally and internationally.

**A6741 Conservation Workshop 3 pts
Jablonski and Berkowitz**

Builds and develops skills required by architectural conservators. A practical conservation course that includes both site and laboratory work. Sessions are designed to provide real world experiences that conservators in practice face, with on-site visits for sampling, analysis, and documentation, followed by laboratory sessions. Understanding materials of the 20th century is a focus.

A6305	Design Workshop: Design With Historic Architecture	3 pts
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This workshop is taught with the third-year “Additions Design Studio” in the Architecture Program. The problem for the studio is a major addition to an important modern building that requires an understanding of the meaning of the old building—all of the ways its form and materials express the values it sought to represent and serve at the time—and the ways that meaning might or might not be extended, enriched, and brought forward by the addition. Studio design projects have included major additions to the Universidad Nacionale Autonomon de Mexico and to the capital complex at Chandigarh and Brasilia.

A6852	History Workshop	3 pts
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Otero-Pailos

Run as a seminar, this workshop provides an opportunity for in-depth research and analysis of the built environment, using the rich resources of New York City as the primary source. Each workshop focuses on a particular issue relating to architectural theory and practice. The multidisciplinary nature of contemporary environmental studies is evidence of the growing consciousness that the construction and interpretation of reality escapes any one discipline. The aim of this course is to familiarize students with contemporary ways of reconciling how we understand and how we transform the built environment. The underlying premise of the course is that traditional models of relating theory and practice are inadequate because they depend on the “closed” teleological principle of “striving towards completion.” As such, they ultimately create the fiction that to be complete, theory must exclude practice, and vice-versa. Students are asked to consider alternative principles of “openness” for relating theory and practice, and to explore the correlative ways to imbricate the aesthetic and the intellectual in the production of interventions and interpretations.

A6795	Preservation Law	3 pts
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Miner

An introduction to legal mechanisms to protect historic resources in the built environment. The focus is on the legal principles underlying preservation laws, including the constitutional issues relating to governmental regulation or real property. Federal, state, and local historic preservation laws and their complementary relationships are studied in the context of relevant environmental and other land use laws.

REQUIRED SECOND-YEAR COURSES

A6790	Historic Preservation Colloquium	3 pts
Bentel		

A discussion-based seminar presented in the students' final semester, this course analyzes major preservation projects following the interdisciplinary format of the four sectors in the Historic Preservation Program: conservation, design, history/theory, and planning. Case studies are developed from student thesis work, and are critically analyzed in relation to the ways in which the theory and practice of preservation have been followed and implemented.

A6751	Thesis, I: Fall Semester	1 pt
A6753	Thesis, II: Spring Semester	6 pts

Thesis, I begins a student's work in defining a thesis question, work that continues through Thesis, II in the second semester. The thesis is a clear, well-researched substantial argument in support of a position on a question of general interest in the field of historic preservation. There are two thesis reviews during the fall semester, where students present their work before an audience of faculty and fellow students, and defend their basic arguments for a question in planning, design, history, or conservation. In the spring semester students present again to all members of the faculty to assess progress on the thesis. In April, the student meets for an hour with a jury of their adviser and readers to defend the thesis and polish their thoughts on the topic. At other times during the semester, the student should meet with Historic Preservation faculty as advisers to their work.

ELECTIVES

A6318	Cultural Site Management	3 pts
Jerome		

Impetus for the preservation of cultural heritage has developed through the recognition of sites as nonrenewable resources. Training is readily available in the specific tasks required to implement preservation, such as documentation and conservation. However, with the exception of sporadic seminars, conferences, short courses, or on-the-job training, far less attention has been paid to the larger, more complex and comprehensive issues of management, the process by which the individual components of preservation are fit together and either succeed or fail. This course utilizes the conservation process in the Burra Charter as the basis for a rational approach to managing cultural sites. The focus is international and case studies are reviewed from both historic and archaeological sites. Divided into three parts, the first focuses on the compilation of background information and identification of the key interested parties; it progress to the analysis of the site significance and assessment of existing conditions and management constraints; and finally, it reviews the development of the management

policy and strategies for its implementation. The delicate balancing act between cultural enhancement and exploitation is explored, as well as the need to periodically monitor and reassess management policy.

A6309 Archeological Sites Conservation and Maintenance **3 pts**

Recently there has been a greater demand for architectural conservators at archaeological sites. As archaeologists become increasingly aware of their ethical responsibility to conserve the architectural remains uncovered, the need for this type of expertise is acutely felt. The first part of this course looks at philosophical and ethical differences between structures that can be rehabilitated as architecture and those that will be stabilized as ruins, while reviewing the international organizations and charters that have been set up for this purpose. The second part of the course deals with techniques of conservation, including site improvements, recording methods, reburial, consolidation, protection, sheltering, materials analyses, and state-of-the-art technology applicable to archaeological sites. Laboratory sessions, guest lectures, and field trips in the New York area supplement lectures and student readings and projects.

A6761 Seminar: Stone 3 pts
Wheeler

The course begins with an outline of rocks and their properties in the context of their use in architecture. Emphasis on hand specimen identification as well as instrument methods such as x-ray diffraction, x-ray fluorescence, scanning electron microscopy-energy dispersive spectroscopy, and polarizing light microscopy in the identification of rocks and their constituent minerals. Major mechanisms of deterioration such as acid rain/dry deposition, salt crystallization, freezing water, biological growth, insolation and heat, and the composition and disposition of soiling on different stone substances are discussed. Concludes with demonstrations and discussions of major conservation activities: (1) cleaning (chemical, abrasive, water washing, laser); (2) stone repair or compensation; (3) consolidation and water repellents.

A6784 Seminar: The Aesthetics and Science of Cleaning Historic Stone Buildings 3 pts

A seminar-style course on stone as a building material, its deterioration through "dirt," and the reasons for and against cleaning, along with a discussion and practicum on the materials/techniques used in cleaning.

A6768 Seminar: Metals 3 pts
Pieper

Reviews the structural and decorative uses of metals in buildings and monuments. Metals to be reviewed include iron and steel; copper and copper alloys including bronze and brass; lead; tin; zinc; aluminum; nickel and chromium. Examines the history of manufacture and use; mechanisms of deterioration and corrosion; and cleaning, repair, and conservation.

A6712 Architectural Finishes in America 3 pts
Jablonski

The principles and practices of architectural finishes conservation, preservation, and maintenance. Students learn the skills to know what questions to ask about finishes conservation and how to begin answering them. Includes lectures, laboratory, and site work. Types of finishes covered include paint, plaster, stucco, murals, twentieth-century composite wall and ceiling finishes, tile linoleum, glass, and wallpaper.

A6734 The Classical Language 3 pts
Stubbs and Literature of Architecture

(Taught alternate years ['06, '08] with Architecture A6773-International architectural preservation practice ['05, '07]). An overview of the tradition of classical architecture, the course begins in antiquity and traces the survivals of forms and motifs through various revivals over 2,500 years. The components of classical architecture and a number of design possibilities are analyzed in detail, and landmarks in architectural literature that relate to the Orders are discussed in lectures. The subject is approached from the point of view of architectural design and encourages utilization of modern scholarship in the history and theory of architecture in the understanding of the aesthetic, social, historical, and political significance of classical architecture. Readings and lectures are structured in a developmental, chronological sequence and presume familiarity with the history of architecture.

A6773 International Architectural 3 pts
Stubbs Preservation Practice

(Taught alternate years ['05, '07] with Architecture A6734-The classical language and literature of architecture ['06, '08]). Recent geopolitical shifts, the effects of "globalization," and radically improved communications and transportation have imposed extraordinary pressures for change in every country. The burgeoning field of heritage conservation has responded accordingly with one result being the creation of a variety of international architectural conservation and preservation programs and projects. An introduction to the key aspects of international architectural conservation practice, addressing its origins and present organization, principle, and procedures, legal bases for heritage protection, and "best practices" in various countries.

A6820	Architecture and Social Policy	3 pts
Byard		

Seminar addressing the connection between architecture and social policy, notably, the way social policy both determines and reveals itself in architectural expression. Objective is to explore the importance that connection in turn gives architecture as an instrument of social leadership and a vivid and enduring form of public disclosure. Students study and "read" works like the Karl Marx Hof, the Viceroy's Palace, the League of Nations, UNAM, Pruitt-Igoe, Battery Park City, Experience Music, and the Reichstag for the case each of them seeks to make for the policies that brought them into being. The object is to understand the public interest in old and new architecture and provide support for the public argument in favor both of preservation and of significant new architecture.

A6705	The Architecture and Development	3 pts
Dolkart	of New York City	

Traces the development of New York City through its architecture and examines the history of architecture as it is reflected in the buildings of the city. Explores the architectural development of New York from the time the city was a minor colonial settlement, to its development as a great commercial and institutional center in the 19th century, through the 20th century, when New York became one of the great cities of the world. Discussion focuses on why various architectural developments became popular in New York; how these developments reflected the complex social history of the city; and what these developments mean to New York's history. Examines the major architectural monuments of New York's five boroughs, but also looks at the more vernacular buildings that reflect the needs and aspirations of the city's middle- and working-class residents.

A6901 (Spring)	2 or 3 pts
A8790 (Fall)	
Research Problems	
Faculty Adviser Selected by Student	

Students may develop a topic of particular interest to them as an Independent Study through a semester. Students should prepare a one-page summary of their topic of study and submit it to the Historic Preservation Office for approval, identifying the goals of the course and the final form of the presentation. Students must also identify a faculty member as an adviser.

MASTER OF SCIENCE DEGREE IN REAL ESTATE DEVELOPMENT (MSRED)

DIRECTOR: Mr. Vishaan Chakrabarti

THE PROGRAM

The Real Estate Development program provides an exceptional education for students of all backgrounds seeking not only to master the fundamentals of the industry, such as development finance, transactions, or construction management, but also to address emerging and current global issues through the lens of urbanization at the Center for Urban Real Estate, CURE, established in 2011. The program provides an unrivalled location for study in New York City, the center of the global real estate industry, and is housed in the Graduate School of Architecture, Planning and Preservation (GSAPP), a world-renowned nexus for the design and development community.

The real estate industry plays a critical role in shaping the built environment through the construction of housing, offices, commercial retail centers, and industrial sites. In addition to private wealth, real estate creates employment, tax revenues, public spaces, cultural symbols, and social environments of lasting significance. At Columbia MSRED, the increasingly critical roles of government agencies, public benefit corporations, and nonprofit groups are also studied and analyzed. The program of study provides an interdisciplinary and coordinated exposure to the major skill sets of the development process, including real estate finance, market analysis, public policy, law, construction, concept design, and asset repositioning. Students are trained for responsible positions in both the public and private sectors of the real estate industry, with particular emphasis on the skills and sensitivities necessary to develop real estate successfully in major urban areas.

Under the leadership of Director Vishaan Chakrabarti, the Real Estate Development program's expanded three-semester curriculum combines the fundamental skills of professional real estate with a holistic approach to urban development as a creative act. Graduates receive a Master of Science of Real Estate Development (MSRED) in an intensive calendar year spanning from May to May. Cross-disciplinary electives draw on the program's access to the extraordinary offerings of GSAPP and Columbia at large, while required coursework immerses students in the three core tenets of urban real estate development: the financial, the physical, and the legal. Synthetic coursework encompassing development case studies, international real estate issues, and an optional thesis bring these three strands together into a unified whole, arming students with the full range of professional and intellectual skills needed to tackle the complex demands of global urban real estate development.

ADMISSIONS

Applications for admission to the program leading to the M.S. degree in Real Estate Development are due January 15. Applicants may hold degrees in a wide range of fields. While academic preparation in development-related disciplines such as economics, business, law, engineering, historic preservation, architecture, construction, and urban planning is highly desirable, it is not essential for admission to the program. Students are required to take the Aptitude Test of the Graduate Record Examination (GRE) if their undergraduate degree was awarded within three years of application to the Real Estate Program. Information may be obtained from the Graduate Record Examination, www.ets.org/gre or the Graduate Management Admissions Test at www.mba.com/the-gmat.aspx.

PROGRAM REQUIREMENTS

The Master of Science degree in Real Estate Development is a three-semester, 45-point degree. Students attend full time during the summer, fall and spring terms. In Columbia MSRED courses, theory, quantitative techniques, industry best practices, and extensive case study materials are combined. Students must take 30 credits of required core courses from the Real Estate Development Program, with the rest constituting electives chosen from elsewhere within Columbia. Upon special application the electives may be increased and certain core courses waived, based on prior experience.

TERM 1 (SUMMER)

ARCHITECTURE OF DEVELOPMENT	3 pts
REAL ESTATE FINANCE I - CONCEPTS & MODELS	4.5 pts
HISTORY OF NYC DEVELOPMENT	3 pts
URBAN ECONOMICS/MARKET ANALYSIS	3 pts
ELECTIVES	1.5-3 pts
TOTAL	13.5 min

TERM 2 (FALL)

REAL ESTATE LAW	3 pts
REAL ESTATE FINANCE II - CASE STUDIES & DEVELOPMENT MODELING	3 pts

CONSTRUCTION MANAGEMENT AND TECHNOLOGY	3 pts
ELECTIVES	6-9 pts
TOTAL	9 pts min

TERM 3 (SPRING)

INTERNATIONAL REAL ESTATE DEVELOPMENT CORE	1.5 pts
REAL ESTATE FINANCE III - CAPITAL MARKETS	3 pts
REAL ESTATE CASE STUDIES	3 pts
ELECTIVES	4.5 - 9 pts
TOTAL	7.5 pts min

INTERNSHIP PROGRAM

During the spring semester, MSRED students have the opportunity to complete an internship along with their spring course work. The Internship Program allows MSRED students to select from a group of private developers, financial institutions, public agencies, consulting firms, and nonprofit organizations, actively involved in real estate. The program is designed to provide participants hands-on experience working with real estate and real estate-related issues. Internship responsibilities can include development feasibility, financial analysis, market research, project management, asset management, policy review, and industry studies.

COURSES OF INSTRUCTION

Pla4310	Real Estate Finance I: Fundamentals	1.5 pts
Srivastava		

Prerequisites: Familiarity with excel functionality, concepts of net present value, and other financial formulae. This course is an introduction to the methods of financial analysis for real estate investments. Topics include methods of valuation, cash flow forecasting, computer modeling, debt, leverage, and deal structures. Emphasis is placed on the financing of individual projects. This

course requires greater than average preparation time. It is heavily oriented toward numerical analysis and makes use of case studies and computer spreadsheet analysis.

A4312 Real Estate Finance II: Case Studies and Development Marketing 3 pts
Suh

This is the second sequence of the Real Estate Finance track. The class will cover a wide variety of issues and processes in real estate investment, finance, and property development topics integrating financial models and third party software. Topics include quantitative and qualitative analysis of property types in varying risk states including ground-up development, transitional, multi-phase and stabilized. Other analysis topics include joint venture structures, fund structures, ground lease structures, operating options and an introduction to new analysis approaches.

Pla4314 001 Real Estate Finance III 3 pts
Frankel

The course will touch on all facets of public and private capital providers, as well as investors, with particular focus on commercial real estate in the public markets: the recent history of securitized real estate debt and equity; the structure of CMBS and roles of the major participants; the growth, structure, valuation and performance measurements of real estate investment trusts (REITS); and other deal formats. Current events will permeate all classes as capital markets is a fluid subject. The general topics include: Real Estate Industry Trends – past and present; Overview of Real Estate Capital Markets and Participants; Alternative Investments (CMBS, REITs, high yield, syndications); Financial and Ownership Structures; Rating Methodology; Bankruptcy; Capital Markets Instruments.

Architecture of Development 3 pts

This course will study the relationship between the developer and the architect, and will explore the development process with respect to design, project management, schedule, and risk. The objective of this course is to gain an understanding of the role of the full development team, expose the students to a variety of case studies, and provide a framework for decision making during the development process.

Pla6352 Development Market Analysis 1.5 pts
LeVasseur Bhaumik

Critical factors in national, regional, and urban real estate markets that determine development opportunities. Course topics include business and construction cycles, regional and urban economic trending, restructuring of urban space dynamics, hotel and retail feasibility and demand analysis, commercial and industrial location theories, and demographic analysis and projection techniques.

Pla6352	Finance Modeling II	1.5 pts
Suh		

This is the second level financial modeling course further developing the fundamental skills and higher level modeling techniques required to create real estate specific financial models utilizing the Microsoft Excel spreadsheet software. Topics include core real estate form construction, asset specific modeling components, flexible model construction, leverage integration, analysis techniques and best practices. This course is intended for students with no exposure to real estate specific financial models and unrelated financial modeling experience.

Pla6272	History of Real Estate	3 pts
Ascher	Development in New York City	

The course is structured primarily as a series of lectures, the first half in chronological order, the second half loosely thematic with additional focus on specific case studies. Because of the size of the class, where possible original materials from the Durst Collection will be reproduced and made available on Courseworks for students. Students will be encouraged to visit with the materials which will be made available at Avery for the purposes of the mid-term project. In addition, students will be required to make one or more field trips to particular locations they are studying, in addition to visiting "The Greatest Grid" exhibition currently at the Museum of the City of New York.

Pla6270	Institutional Real Estate	1.5 pts
Kuzmicki		

The course examines institutional real estate investment strategy and decision-making. Topics will include portfolio theory and the role of real estate in an institutional portfolio; investment styles; manager and vehicle selection; and, risk assessment. Extensive use will be made of cases. The objectives of the course would be to establish a context for institutional approaches to real estate; expose the students to a variety of investment vehicles and structures some of which they may examine in greater depth in subsequent courses; and to further their investment evaluation skills, emphasizing both qualitative and quantitative analysis.

Pla6228	Alternative and Distressed Investment Strategies	3 pts
Sheets		

This course presents a detailed review of the techniques for financing affordable housing. In combination with the focus on financing techniques, the course also looks at the development issues associated with this complex area and the policy focus of governmental programs. Incentives, public-private partnerships, the use of tax exempt bonds, the securitization of debt are all techniques initially developed for use in residential finance and in the financing of affordable housing.

Pla6214	Real Estate Investment Analysis	1.5 pts
Gallinelli		

This course is intended specifically to benefit those students who have a somewhat limited background in finance by offering an “applied finance” approach to mastering key real estate investment concepts. Using several different property types as examples, the course evaluates various scenarios of potential acquisition, cash flow, financing, resale, and partnership.

Pla6369	Residential Marketing	1.5 pts
Orlanski Ours		

This class will review case studies and lessons learned from programming residential Master Plans to Micro Units, with a focus on public programing (outdoors spaces, lobbies, amenities, hotel services and mixed use components) and private planning (new construction vs conversion, relationship of multiple towers, view studies, unit mix, residential guidelines for cores and back of house/front of house circulation).

Pla6769	The Transaction Process	1.5 pts
Adelstein		

This elective will teach practical methods and techniques used by investors, lenders, and equity investors: i) how to underwrite value-add opportunistic income-producing real estate, ii) finance positions in real estate using various debt facilities and/or equity vehicles, and iii) understand the transaction process through group participation in a mock transaction case study.

Pla6228	U.S. Housing Policy	1.5 pts
VanAmerongen		

This course will provide an overview of the interventions that the government has undertaken over the past several decades to address housing need. The focus will

be on policies enacted by the federal government, but will also cover states' and municipalities' roles in administering federal programs, and tools they have utilized to aid in the provision and preservation of housing. This course is intended to provide useful background for students to go on to study housing finance.

**Pla6219
Severino**

Urban Economics

1.5 pts

The course largely concerns the introduction of space and location to microeconomics. It intends to give students of real estate development an understanding of the underlying economic principles related to real estate. Economic theory can enable the understanding of the existence of cities, their size, and how they grow. It can also be utilized to understand land rents and uses, the economics of housing, and the economics of commercial real estate.

**Pla6228
Sheets**

**Alternative and Distressed
Investment Strategies**

3 pts

This course introduces students to the basic framework of commercial real estate investment through a lens of distressed and distorted assets and markets. Basic elements of bankruptcy procedure and valuation will be discussed, along with a specific concentration on those issues most pertinent to workout situations. Common characteristics and factors that lead to distress also will be addressed. Students will be exposed to cases and experts that bring forth legal, valuation, strategic, and other key considerations typical in commercial workouts—with maximum recovery from a lender, borrower, and joint-venture partner perspective.

**Pla6362
Matthews + Baumgartner**

**Developing a High-Performance
Building**

3 pts

This course applies the technical know-how of high performance building to the real world scenario of a building project. Students, organized into development teams, will innovate and promote green design, construction and operation strategies within the constraints of a fixed budget, competing developer and investor priorities, policy drivers and inhabitants, and contrasting views of market demand.

**Pla6357
Silverman**

**Construction Management
+ Technology**

3 pts

This course bridges the physical disciplines with the regulation and financial complexities of modern development. The course provides an overview of construction

technologies, the construction process, and construction management. Course topics include cost estimating; value engineering; scheduling and management methods; contract documentation and administration (AIA); RFP/bidding; insurance; labor relations; civil and mechanical engineering; and, delivery systems design and implementation.

Pla6228	Global Markets: NYC, London & Tokyo	1.5 pts
Kalsi		

This course will focus on the relative opportunities presented for investors considering investment in these three global gateway cities. The class will focus on investment themes, risks, opportunities and real life case studies. The case studies will focus on the global investment strategy of GreenOak Real Estate (greenoakrealestate.com) and may include site tours of NYC investments such as 285 Madison Avenue and 425 Park Avenue. The focus will be on strategy, financial analysis and "making the case" for investing.

Pla6281	Hotel Development and Investment Analysis	1.5 pts
Feil		

The course will cover the complete financial cycle of hotel investment analysis including development; lending; operations; investment analysis; renovation decisions; and acquisition or disposition. Real estate valuation principles and procedures are explored with emphasis on the replacement cost, sales comparison, and income capitalization approaches. As well, the role and function of the asset manager is discussed with emphasis on investment underwriting, operations analysis, portfolio management, strategic investment analysis, market strategy, management contracts, franchises and involvement with the property management team.

Pla6281	Hyperdensity and the Future of the City	3 pts
Chakrabarti+Toro-Vaca		

This course, based on Professor Chakrabarti's recently published book *A Country of Cities: A Manifesto for an Urban America*, hypothesizes that hyperdensity – defined as density above 30 units/acre – paired with robust transit infrastructure is a potential "silver bullet" for addressing many of the economic and social ills confronting the United States today. The course will feature eight lectures by Professor Chakrabarti, each covering one chapter from the book. Additional lectures may be given by guests from the real estate or design industry. Pairs of students will construct and present opposing views on assigned projects that support or question the central thesis of the book. Presentations will be accompanied by a term paper. This class is open enrollment.

Pla6281	Launching a Real Estate Development Company	1.5 pts
Hamlin		

Is your goal to start a real estate development company? In this course we will discuss the challenges and rewards of real estate entrepreneurship and explore alternative strategies for launching an entrepreneurial real estate venture. After learning about the role and structure of a business plan, students will focus on creating and presenting individual plans for their future real estate development businesses. A combination lecture and lab course, the professor will provide guidance and counsel, but each student will be expected to research their business idea and build a supportable case for their future business plan.

Pla6377	Private Equity and Capital Raising	1.5 pts
Clark + Weidner		

This course will expose students to the fundamentals of real estate private equity, basic terms, players in the industry, various roles of professionals, legal and financial aspects of real estate private equity in today's environment and will teach a broad base of understanding in private equity real estate to prepare students in the concepts, terms and fundamentals that govern the real estate private equity markets. The course will be taught from the perspective of the General Partner in managing funds and the Limited Partner in investing in funds.

Pla6568	Public/Private Partnerships in Real Estate Development	1.5 pts
Paley		

This course explores public sector involvement in real estate development, and is designed to impart a set of skills necessary to manage the complex medley of governmental actors with conflicting goals and agendas in public/private development. Case studies are drawn from a variety of projects, primarily in the New York City metropolitan region. These case studies provide an opportunity to examine the motivations, powers and constraints of public agencies, as well as the approaches to planning projects, soliciting support, sustaining momentum and structuring public/private partnerships.

A4538	Real Estate Entrepreneurialism for Architects	3pts
Bell	Builders, Developers, Buyers & Sellers	

This course is led by one of the first practitioner academics to define the independent discipline of development. The lectures are designed to fill in the gaps with practical knowledge and hard lessons learned from generations of

practitioners. Students are provided with the know-hows of materializing their visions at the entrepreneurial scale.

A6333 Real Estate Law Fundamentals 3 pts
Leland

This course examines development and investment issues as they interfaced with property, zoning, contract, securities, and tax law. The course provides students the opportunity to actively engage legal professionals in mitigating and resolving contractual and regulatory risk.

A6333 Skyscrapers: Cities in the Sky 1.5 pts
Ascher

This course looks at every aspect of life at great height - from the origins of tall buildings in New York and Chicago, to the economics of skyscraper design, to the people and technology that lie behind skyscraper construction and operation, to the sociological and urban design implications of this popular urban form, to the shape and nature of the skyscrapers of the future. Supported by a variety of readings on the subjects of tall buildings, it draws heavily on case studies relating to skyscrapers around the world and features selected guest speakers involved in their development or construction.

A8222 Thesis I: Research 1pt
Keenan

This course examines the leading qualitative and quantitative research methods in the built environment professions. Concentration is placed on the methods of architecture, urban economics, construction management and applied real estate finance. With an eye for the development of a thesis, students work independently to develop a framework for undertaking the completion and defense of a thesis in the Spring semester. Whether empirical, applied or observational, students gain the opportunity to develop critical analytical skill sets which allow them to construct an operational research design and then to test the hypothesis and methods underlying such efforts.

**Pla6212 Affordable Housing, Development 1.5 ptss
Poteat and Policy**

This course uses the affordable housing techniques discussed in previous semesters to design and plan an actual affordable housing development. Besides utilizing affordable

housing techniques such as tax credit and tax exempt bond financing, the course will also look at the other aspects of affordable housing development such as design and constructability elements, community involvement and political considerations. Developers must be a “jack of all trades” to successfully execute a new project. Although a keen understanding of affordable housing finance is a necessity for any successful developer, development requires an understanding of several disciplines. (Affordable Housing Finance is a prerequisite unless you have permission from the professor.)

Pla6236	Asset Management and Ownership	1.5pts
Queen		

This course will study the issues that impact an asset from initial investment through disposition, with a particular focus on leasing, repositioning strategies, hold-sell analysis, and operations. The focus will be to demonstrate how effective asset management works with property management, leasing, construction/development and accounting to maximize financial performance. Overall, the class will emphasize real-world issues and examples through the life cycle of an asset.

Pla6238	New Directions for Development: Rethinking Workplaces, Buildings, and the City	1.5pts
Laing		

This seminar class will explore emerging trends that will impact the shape of future development. Trends to be explored include the impact of new technologies on how we work, live, and use space and how this will affect the design and development of workplaces, buildings, and the city. We will identify innovations in work, technology and space which the developer will need to be familiar with to provide leading edge products given rapidly changing corporate and end user expectations. (Class capped at 25 MSRED students, FCFS registration)

Pla6266	The Works: Infrastructure Challenges and Opportunities	3pts
Ascher		

This course will look at the connections between infrastructure and real estate in economic development – both over time and today – to understand the challenges and opportunities that these largely invisible systems present to developers today. It takes the New York region as its laboratory, but also incorporates case studies from other American and foreign cities – focusing particularly on those who have best used infrastructure to their advantage in promoting successful development. It also grapples with the questions of infrastructure financing, and examines the role that the development community can play in mitigating the impact of shortfalls in public sector infrastructure spending in cities around the world.

Pla6285	Underwriting Intensive	1.5 pts
Nussenblatt		

The course covers all major facets of underwriting income-producing commercial real estate from a lending perspective. Students learn how to effectively underwrite stabilized office, retail, industrial, multifamily and hotel properties. Emphasis is placed on credit evaluation, cash flow analysis, break-even analysis, market analysis, sponsorship and loan structure. Exit strategies including securitization and loan sales are also be examined.

Pla6266	Underwriting II	1.5 pts
Nussenblatt		

Emphasis is to be placed on loan structure, interest reserve analysis, LIBOR caps, reposition timing, credit evaluation, market analysis and sponsorship. Exit strategies including permanent takeout financing and loan sales will also be discussed.

Pla6335	Capstone-Development Case Studies	3 pts
Hamlin, Hadi, Amsler		

The class will utilize various real estate development and investment case studies, in conjunction with outside real estate developers and investors within the industry. The cases will reach across a broad array of product types, situational decision making and business styles. Students will need to develop rapid development decision-making and management skills while working in a team-based process where all aspects of the real estate business will prove to be critical success factors. Training will use real world case studies of actual development sites, in real time, that require defining new development and repositioning plans and focusing on essential feasibility. This class is the synthesis and implementation of the skills learned throughout the student's immersions in development curriculum.

Pla6345	Property in Common	3 pts
Ingraham		

**This is a CURE class open to M.Arch and MSRED students .Architecture's relation to real property has been, to date, almost fully defined by the limited, yet significant, role architecture has played in real estate valuation. This course looks at systemic and theoretical issues that underlie these contemporary dilemmas in architectural design and real estate development. Its goal is to examine points of confluence/nexus between property, real estate systems, and architecture that are significant not only for specific buildings or development projects but also for systems of sovereignty, finance, design, law, justice, and nature that such a nexus advances or inhibits.

Pla6375	Commercial Leasing	1.5 pts
Gold + Nelson		

This course will look at commercial leasing from both a landlord and tenant perspective, and contain both legal and business analysis of the most important provisions and issues in leasing today. It will provide a firm basis for understanding space leases as the revenue stream behind building operations, financing and profits. Allocation of risks related to the provision of space in a building will be a consistent thread in the conversation. The reading will include clauses from standard leases and articles about the subject matter, as well as some court decisions that illuminate the complexities and conflicts.

Pla6384	Tax Issues in Acquisitions and Developments	1.5 pts
O'Toole		

This course will be an overview of federal income tax and local tax issues that affect the planning and execution of urban real estate developments. Topics to be addressed will include income tax treatment for sellers (and alternatives to cash acquisitions), transfer and mortgage recording tax concerns, issues with equity partners, and distinctions between condominium and rental developments.

Pla6513	Post-Storm Development: Opportunities for Rebuilding and Innovation	1.5 pts
Mitchell + Chambers		

This course examines fundamental questions and realities about threats to coastal communities throughout New York City from increased storm events such as hurricanes, superstorms, extensive rainfall, storm surge and intense winds. Some of the questions the class will address include: What kind of leadership (political, economic and design) and opportunities (structural and non-structural) for innovation is the public sector capable of providing to the post-Sandy rebuilding effort, as well as emergency preparedness.

Pla6585	Retail Real Estate and Development	1.5 pts
Fogg + Mandelbaum		

The course will discuss retail real estate from the perspective of both the retailer and the landlord / developer. A thorough understanding of the retailer's business model will increase the likelihood of success for retail real estate investors and developers. At the same time, the class will review the primary considerations of the retail developer and owner, including tenant mix, shopping center design, leasing, and valuation. A strong emphasis is placed on leasing and financial valuation.

Pla6770	Global Practice Studio	3 pts
Chakrabarti , Sample, Amsler		

Rio Das Pedras (Brazil): A Case Study of New Approaches for Informal Settlements. With over 70,000 residents, Rio das Pedras is one of the largest and most vibrant informal settlements in Rio de Janeiro. This multidimensional studio will explore new approaches for upgrading informal areas by tapping inherent dynamics as a catalyst for development. Of particular focus will be strategies aimed at channeling both public and private investment through an economic, social and cultural cycle that can support development in the long term. (MSRED By application only; M.Arch students will participate in the lottery)

Pla6371	Being the Client	1.5pts
McDaniel		

The real estate development process is rife with potential complications and pitfalls. This course will explore the development process with respect to site selection, design, construction, value, and risk. The objective of The Architecture of Development is to gain an understanding of the role of the full development team, expose the students to a variety of case studies, and provide a framework for decision making during the development process.

A6340	Real Estate Development Thesis	2pts
Selected Faculty Advisors and Readers		

*Students meet directly with their primary advisor, and also arrange for two additional thesis readers. More information is available in 411 Avery. The thesis is an important part of the real estate development curriculum. It is an individual investigation of the student's own choice that is supervised by a faculty member, and it is intended to demonstrate the student's ability to structure an argument about an issue or problem significant or clearly relevant to real estate development practice or the development profession. The thesis is the culmination of the three-semester course of study and should demonstrate a synthetic understanding of the research and professional skills and substantive knowledge bases which form the content of the curriculum of the Real Estate Development Program.

A6236	Asset Management	1.5 pts
Queen		

Effective management at the property and portfolio level is increasingly a critical value-additive function of the real estate process. This course focuses on best practices in

asset management with an emphasis on processes for operations, cost controls, and tenant relations techniques.

A8792 Individual Research/Internship 1.5 pts
TBD

Career Development Officer, Kate Rockey-Harris, will send out more information at the beginning of the semester. Please register for this class if you plan to do a spring internship or an individual research project with an MSRED Faculty advisor. It is only possible to register for this class once per semester.

Pla6338 International Real Estate 3pts
Atwell + Atwell

The International Real Estate Development Core course will introduce students to the macro growth trends which are central to the changing opportunities within the global commercial real estate world, as well as the drivers, challenges and risks associated with the opportunities in the emerging world, and how to value the risk against the reward when entering a new and developing market. The course will broadly address the ways in which to evaluate one market against another, as well as the variety of possibilities of taking advantage of the benefits of international real estate strategies, from portfolio diversification, distribution of specific sector expertise in new markets with demand, to the identification of unique opportunities in frontier markets experiencing a dislocating positive inflection in economic or geopolitical conditions.

N/A International Real Estate Regional Elevatives 3pts
Columbia University MSRED Faculty

The purpose of the regional electives is for students to research and to develop market specific knowledge and investment strategies. The course culminates with students presenting their portfolio allocations to an investment committee panel made up of industry executives from the institutional and investment banking industry. Each regional team is initially allocated a specific dollar amount by the industry investment committee. Students and professors return at the end of the regional elective to argue for more or for less, and must do so by presenting a nuanced, fact-based assessment of their region. This real-time evaluation requires students to develop market specific expertise through applied portfolio management. Over winter break, selected members from each team will travel to the specific regions with their professors to actively engage in testing the methods and strategies which they have articulated over the course of the semester. See BRIC-X.

DUAL DEGREE PROGRAMS

To utilize more fully the facilities and resources of the University and to provide opportunities for students to pursue studies in related fields, the School, in conjunction with other departments and faculties, has established several dual/joint degree programs. Each program leads to the award of two professional degrees. Students who wish to enter one of the programs described below must apply to each of the participating programs and be admitted to both. Students wishing to pursue dual degree program with other schools at Columbia are responsible for consulting the respective school's admissions office for further information.

DUAL DEGREE PROGRAMS WITHIN THE GSAPP

Master of Architecture & Master of Science in Historic Preservation

Master of Architecture & Master of Science in Urban Planning

Master of Architecture & Master of Science in Critical, Curatorial & Conceptual Practices in Architecture

Master of Science in Urban Planning & Master of Science in Historic Preservation

JOINT DEGREE PROGRAMS WITHIN THE GSAPP

Master of Architecture & Master of Science in Real Estate Development

Master of Science in Urban Planning & Master of Science in Real Estate Development

Master of Science in Historic Preservation & Master of Science in Real Estate Development

DUAL DEGREE PROGRAMS WITH OTHER SCHOOLS AT COLUMBIA

Master of Science in Urban Planning & Master of Business Administration (in conjunction with the Columbia Business School)

Master of Science in Urban Planning & Master of International Affairs (in conjunction with the School of International and Public Affairs)

Master of Science in Urban Planning & Juris Doctor (in conjunction with the School of Law)

Master of Science in Urban Planning & Master of Public Health (in conjunction with the Mailman School of Public Health)

Master of Science in Urban Planning & Master of Science in Social Work (in conjunction with the School of Social Work)

Architecture and Historic Preservation

The Graduate School of Architecture, Planning, and Preservation offers a dual program leading to the degree of Master of Architecture and the degree of Master of Science in Historic Preservation. A student must enroll for 144 points of credit, which may be earned in eight terms in residence full-time in the School. Each term must have a minimum of 18 points. Students must be registered full-time as MS.HP for two terms. A minimum of 108 points is required for M.Arch. A minimum of 36 points is required for MS. HP. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

TERM 1 (FALL)

REGISTERED MS.HP

HISTORIC PRESERVATION STUDIO I	4 pts
HISTORIC PRESERVATION THEORY AND PRACTICE	3 pts
INTRODUCTION TO ARCHITECTURAL MATERIALS	3 pts
PRESERVATION PLANNING	3 pts
AMERICAN ARCHITECTURE I	3 pts
ELECTIVE (MS. HP)	3 pts
TOTAL	19 pts

TERM 2 (SPRING)

REGISTERED MS.HP

HISTORIC PRESERVATION STUDIO II	4 pts
INTRODUCTION TO HISTORIC SYSTEMS AND STRUCTURES	3 pts
AMERICAN ARCHITECTURE II	3 pts
ELECTIVE (MS. HP)	3 pts

ELECTIVE (M.ARCH)	3 pts
ELECTIVE (M.ARCH)	3 pts
TOTAL	19 pts

TERM 3 (FALL)
REGISTERED M.ARCH

CORE STUDIO I	9 pts
ARCHITECTURAL TECHNOLOGY I	3 pts
HISTORY OF ARCHITECTURE I	3 pts
VISUAL STUDIES I	3 pts
TOTAL	18 pts

TERM 4 (SPRING)
REGISTERED M.ARCH

CORE STUDIO II	9 pts
ARCHITECTURAL TECHNOLOGY II	3 pts
HISTORY OF ARCHITECTURE II	3 pts
VISUAL STUDIES II	3 pts
TOTAL	18 pts

TERM 5 (FALL)
REGISTERED M.ARCH

CORE STUDIO III	9 pts
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ARCHITECTURAL TECHNOLOGY III	3 pts
ARCHITECTURAL TECHNOLOGY IV	3 pts
HISTORY / THEORY DISTRIBUTION 1	3 pts
TOTAL	18 pts

TERM 6 (SPRING)
REGISTERED M.ARCH

ADVANCED STUDIO IV	9 pts
ARCHITECTURAL TECHNOLOGY V	3 pts
HISTORY / THEORY DISTRIBUTION 2	3 pts
VISUAL STUDIES ELECTIVE	3 pts
TOTAL	18 pts

TERM 7 (FALL)
REGISTERED M.ARCH

ADVANCED STUDIO V	9 pts
ARCHITECTURAL TECHNOLOGY VI	3 pts
PROFESSIONAL PRACTICE	3 pts
HISTORIC PRESERVATION COLLOQUIUM (MS.HP)	3 pts
THESIS I (MS.HP)	1 pt
TOTAL	19 pts

TERM 8 (SPRING)
REGISTERED M.ARCH

ADVANCED STUDIO VI	9 pts
HISTORY/THEORY DISTRIBUTION 3	3 pts
HISTORY/THEORY DISTRIBUTION 4	3 pts
THESIS II (MS.HP)	4 pts
TOTAL	19 pts

Architecture and Urban Planning

The Graduate School of Architecture, Planning, and Preservation offers a dual program leading to the degree of Master of Architecture and the degree of Master of Science in Urban Planning. A student must enroll for 144 points of credit, which may be earned in eight terms in residence full-time in the School. Each term must have a minimum of 18 points. Students must be registered full-time as MS.UP for two terms. A minimum of 108 points is required for M.Arch. A minimum of 36 points is required for MS.UP. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

TERM 1 (FALL)
REGISTERED MS.UP

PLANNING METHODS	3 pts
PLANNING HISTORY AND THEORY	3 pts
ECONOMICS FOR PLANNERS	3 pts
PLANNING LAW	3 pts
SPECIALIZATION: CORE COURSE ELECTIVE	3 pts
HISTORY/THEORY DISTRIBUTION 1 (MARCH)	3 pts
TOTAL	18 pts

TERM 2 (SPRING)
REGISTERED MS.UP

PLANNING STUDIO	6 pts
SPECIALIZATION: ELECTIVE	3 pts
SPECIALIZATION: ELECTIVE	3 pts
INTRODUCTION IS GIS	3 pts
HISTORY/THEORY DISTRIBUTION 2 (MARCH)	3 pts
TOTAL	18 pts

TERM 3 (FALL)
REGISTERED M.ARCH

CORE STUDIO I	9 pts
ARCHITECTURAL TECHNOLOGY I	3 pts
HISTORY OF ARCHITECTURE I	3 pts
VISUAL STUDIES I	3 pts
TOTAL	18 pts

TERM 4 (SPRING)
REGISTERED M.ARCH

CORE STUDIO II	9 pts
ARCHITECTURAL TECHNOLOGY II	3 pts
HISTORY OF ARCHITECTURE II	3 pts
VISUAL STUDIES II	3 pts

TOTAL	18 pts
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TERM 5 (FALL)
REGISTERED MARCH

CORE STUDIO III	9 pts
ARCHITECTURAL TECHNOLOGY III	3 pts
ARCHITECTURAL TECHNOLOGY IV	3 pts
HISTORY / THEORY DISTRIBUTION 3	3 pts
TOTAL	18 pts

TERM 6 (SPRING)
REGISTERED MARCH

ADVANCED STUDIO IV	9 pts
ARCHITECTURAL TECHNOLOGY V	3 pts
HISTORY / THEORY DISTRIBUTION 4	3 pts
VISUAL STUDIES ELECTIVE	3 pts
TOTAL	18 pts

TERM 7 (FALL)
REGISTERED MARCH

ADVANCED STUDIO V	9 pts
ARCHITECTURAL TECHNOLOGY VI	3 pts
PROFESSIONAL PRACTICE	3 pts

THESIS I (MS.UP)	3 pt
TOTAL	18 pts

TERM 8 (SPRING)
REGISTERED M.ARCH

ADVANCED STUDIO VI	9 pts
ELECTIVE	3 pts
ELECTIVE	3 pts
THESIS II (MS.UP)	3 pt
TOTAL	18 pts

Architecture and Critical, Curatorial & Conceptual Practices

The Graduate School of Architecture, Planning, and Preservation offers a dual program leading to the degree of Master of Architecture and the degree of Master of Science in Critical, Curatorial and Conceptual Practices. A student must enroll for 144 points of credit, which may be earned in eight terms full-time in residence in the School. Each term must have a minimum of 18 points. Students must be registered full-time as MS.CCCP for two terms. A minimum of 108 points is required for M.ARCH. A minimum of 36 points is required for MS.CCCP. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

TERM 1 (FALL)
REGISTERED M.ARCH

CORE STUDIO I	9 pts
ARCHITECTURAL TECHNOLOGY I	3 pts

HISTORY OF ARCHITECTURE I	3 pts
VISUAL STUDIES I	3 pts
TOTAL	18 pts

TERM 2 (SPRING)
REGISTERED MARCH

CORE STUDIO II	9 pts
ARCHITECTURAL TECHNOLOGY II	3 pts
HISTORY OF ARCHITECTURE II	3 pts
VISUAL STUDIES II	3 pts
TOTAL	18 pts

TERM 3 (FALL)
REGISTERED MARCH

CORE STUDIO III	9 pts
ARCHITECTURAL TECHNOLOGY III	3 pts
ARCHITECTURAL TECHNOLOGY IV	3 pts
HISTORY / THEORY DISTRIBUTION 1	3 pts
TOTAL	18 pts

TERM 4 (SPRING)
REGISTERED MARCH

ADVANCED STUDIO IV	9 pts
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ARCHITECTURAL TECHNOLOGY V	3 pts
HISTORY / THEORY DISTRIBUTION 2	3 pts
VISUAL STUDIES ELECTIVE	3 pts
TOTAL	18 pts

TERM 5 (FALL)
REGISTERED M.ARCH

ADVANCED STUDIO V	9 pts
ARCHITECTURAL TECHNOLOGY VI	3 pts
PROFESSIONAL PRACTICE	3 pts
HISTORY / THEORY DISTRIBUTION 3	3 pt
TOTAL	18 pts

TERM 6 (SPRING)
REGISTERED M.ARCH

ADVANCED STUDIO VI	9 pts
HISTORY / THEORY DISTRIBUTION 4	3 pts
ELECTIVE	3 pts
ELECTIVE	3 pt
TOTAL	18 pts

TERM 7 (FALL)
REGISTERED MS.CCCP

CCCP ARCH COLLOQUIUM I: OPERATING PLATFORMS	3 pts
ELECTIVE LECTURE	3 pts
ELECTIVE SEMINAR	3 pts
CCCP ARCH: THESIS I	9 pt
TOTAL	18 pts

TERM 8 (SPRING)
REGISTERED MS.CCCP

CCCP ARCH COLLOQUIUM II: CONTEMPORARY CRITICAL DISCLOSURE	3 pts
ELECTIVE LECTURE	3 pts
ELECTIVE SEMINAR	3 pts
CCCP ARCH: THESIS II	9 pt
TOTAL	18 pts

Urban Planning and Historic Preservation

The Graduate School of Architecture, Planning, and Preservation offers a dual program leading to the degree of Master of Science in Urban Planning and the degree of Master of Science in Historic Preservation. A student must enroll for 96 points of credit, which may be earned in six terms in residence full-time in the School. Students must be registered full-time as MS.UP for three terms and MS.HP for three terms. A minimum of 45 points is required for MS.UP. A minimum of 46 points is required for MS.HP. A minimum of 5 additional points is required to meet total points of credit for dual degree program. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

TERM 1 (FALL)
REGISTERED MS.UP

PLANNING METHODS	3 pts
PLANNING HISTORY AND THEORY	3 pts
ECONOMICS FOR PLANNERS	3 pts
PLANNING LAW	3 pts
SPECIALIZATION: CORE COURSE ELECTIVE	3 pts
TOTAL	15 pts

TERM 2 (SPRING)
REGISTERED MS.UP

PLANNING STUDIO	6 pts
SPECIALIZATION: ELECTIVE	3 pts
SPECIALIZATION: ELECTIVE	3 pts
INTRODUCTION IS GIS	3 pts
TOTAL	15 pts

TERM 3 (FALL)
REGISTERED MS.HP

HISTORIC PRESERVATION STUDIO I	4 pts
HISTORIC PRESERVATION THEORY AND PRACTICE	3 pts
INTRODUCTION TO ARCHITECTURAL MATERIALS	3 pts
PRESERVATION PLANNING	3 pts
AMERICAN ARCHITECTURE I	3 pts

TOTAL	16 pts
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TERM 4 (SPRING)
REGISTERED MS.HP

HISTORIC PRESERVATION STUDIO II	4 pts
INTRODUCTION TO HISTORIC SYSTEMS AND STRUCTURES	3 pts
AMERICAN ARCHITECTURE II	3 pts
ELECTIVE (MS.HP)	3 pts
ELECTIVE (MS.HP)	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION (MS.UP)	3 pts
TOTAL	19 pts

TERM 5 (FALL)
REGISTERED MS.HP

HISTORIC PRESERVATION COLLOQUIUM	3 pts
THESIS I (MS.HP)	1 pts
THESIS I (MS.UP)	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION (MS.UP)	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION (MS.UP)	3 pts
ELECTIVE (MS.HP)	3 pts
TOTAL	16 pts

TERM 6 (SPRING)
REGISTERED MS.UP

THESIS II (MS.HP)	4 pts
THESIS II (MS.UP)	3 pts
ELECTIVE (MS.HP)	3 pts
GENERAL ELECTIVE (MS.UP/MS.HP)	3 pts
GENERAL ELECTIVE (MS.UP/MS.HP)	3 pts
TOTAL	16 pts

Architecture and Real Estate Development

The Graduate School of Architecture, Planning, and Preservation offers a dual program leading to the degree of Master of Architecture and the degree of Master of Science in Real Estate Development. A student must enroll for 144 points of credit, which may be earned in eight terms in residence full-time in the School. Each term must have a minimum of 18 points. Students must be registered full-time as MS.RED for two terms. A minimum of 108 points is required for M.Arch. A minimum of 36 points is required for MS. RED. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

TERM 1 (FALL)
REGISTERED M.ARCH

CORE STUDIO I	9 pts
ARCHITECTURAL TECHNOLOGY I	3 pts
HISTORY OF ARCHITECTURE I	3 pts
VISUAL STUDIES I	3 pts
TOTAL	18 pts

TERM 2 (SPRING)
REGISTERED M.ARCH

CORE STUDIO II	9 pts
ARCHITECTURAL TECHNOLOGY II	3 pts
HISTORY OF ARCHITECTURE II	3 pts
VISUAL STUDIES II	3 pts
TOTAL	18 pts

TERM 3 (SUMMER)
REGISTERED MS.RED

REAL ESTATE DEVELOPMENT - PRACTICUM	6 pts
REAL ESTATE FINANCE I - CONCEPTS & MODELS	3 pts
URBAN ECONOMICS / MARKET ANALYSIS	3 pts
HISTORY OF NYC DEVELOPMENT	3 pts
GENERAL ELECTIVE (MS.RED)	3 pts
TOTAL	18 pts

TERM 4 (FALL)
REGISTERED M.ARCH

CORE STUDIO III	9 pts
ARCHITECTURAL TECHNOLOGY III	3 pts
ARCHITECTURAL TECHNOLOGY IV	3 pts
REAL ESTATE FINANCE II - CASE STUDIES	3 pts
TOTAL	18 pts

TERM 5 (SPRING)
REGISTERED M.ARCH

ADVANCED STUDIO IV	9 pts
ARCHITECTURAL TECHNOLOGY V	3 pts
VISUAL STUDIES ELECTIVE	3 pts
REAL ESTATE FINANCE III - CAPITAL MARKETS (MS.RED)	3 pts
TOTAL	18 pts

TERM 6 (FALL)
REGISTERED M.ARCH

ADVANCED STUDIO V	9 pts
ARCHITECTURAL TECHNOLOGY VI	3 pts
PROFESSIONAL PRACTICE	3 pts
HISTORY / THEORY DISTRIBUTION 1	3 pt
TOTAL	18 pts

TERM 7 (SPRING)
REGISTERED M.ARCH

ADVANCED STUDIO VI	9 pts
HISTORY / THEORY DISTRIBUTION 4	3 pts
CASE DEVELOPMENT STUDIES (MS.RED)	3 pts
INTERNATIONAL REAL ESTATE DEVELOPMENT	1.5 pt
GENERAL ELECTIVE (MS.RED)	1.5 pt

TOTAL	18 pts
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TERM 8 (FALL)
REGISTERED MS.RED

REAL ESTATE LAW	3 pts
CONSTRUCTION MANAGEMENT AND TECHNOLOGY	3 pts
ELECTIVE (M.ARCH)	3 pts
ELECTIVE (M.ARCH)	3 pt
HISTORY / THEORY DISTRIBUTION 2 (M.ARCH)	3 pt
HISTORY / THEORY DISTRIBUTION 3 (M.ARCH)	3 pt
TOTAL	18 pts

Urban Planning and Real Estate Development

The Graduate School of Architecture, Planning, and Preservation offers a dual program leading to the degree of Master of Science in Urban Planning and the degree of Master of Science in Real Estate Development. A student must enroll for 96 points of credit, which may be earned in six terms in residence full-time in the School. Students must be registered full-time as MS.RED for two terms, where each term must have a minimum of 18 points. A minimum of 60 points is required for MS.UP. A minimum of 36 points is required for MS. RED. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

TERM 1 (FALL)
REGISTERED MS.UP

PLANNING METHODS	3 pts
PLANNING HISTORY AND THEORY	3 pts
ECONOMICS FOR PLANNERS	3 pts

PLANNING LAW	3 pts
SPECIALIZATION: CORE COURSE ELECTIVE	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION	3 pts
TOTAL	18 pts

TERM 2 (SPRING)
REGISTERED MS.UP

PLANNING STUDIO	6 pts
SPECIALIZATION: ELECTIVE	3 pts
SPECIALIZATION: ELECTIVE	3 pts
INTRODUCTION IS GIS	3 pts
TOTAL	15 pts

TERM 3 (SUMMER)
REGISTERED MS.RED

REAL ESTATE DEVELOPMENT - PRACTICUM	6 pts
REAL ESTATE FINANCE I - CONCEPTS & MODELS	3 pts
URBAN ECONOMICS / MARKET ANALYSIS	3 pts
HISTORY OF NYC DEVELOPMENT	3 pts
GENERAL ELECTIVE (MS.RED)	3 pts
TOTAL	18 pts

TERM 4 (FALL)
REGISTERED MS.UP

THESIS I	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION	3 pts
REAL ESTATE FINANCE II - CASE STUDIES	3 pts
TOTAL	15 pts

TERM 5 (SPRING)
REGISTERED MS.UP

THESIS II	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION	3 pts
REAL ESTATE FINANCE III - CAPITAL MARKETS	3 pts
DEVELOPMENT CASE STUDIES (MS.RED)	3 pts
INTERNATIONAL REAL ESTATE DEVELOPMENT CORE	1.5 pts
GENERAL ELECTIVE (MS.RED)	15 pts
TOTAL	15 pts

TERM 6 (FALL)
REGISTERED MS.RED

REAL ESTATE LAW	3 pts
CONSTRUCTION MANAGEMENT AND TECHNOLOGY	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION	3 pts

GENERAL ELECTIVE / SECTOR SPECIALIZATION	3 pts
GENERAL ELECTIVE / SECTOR SPECIALIZATION	3 pts
GENERAL ELECTIVE (MS.RED/MS.UP)	3 pts
TOTAL	18 pts

Historic Preservation and Real Estate Development

The Graduate School of Architecture, Planning, and Preservation offers a dual program leading to the degree of Master of Science in Historic Preservation and the degree of Master of Science in Real Estate Development. A student must enroll for 96 points of credit, which may be earned in six terms in residence full-time in the School. Students must be registered full-time as MS.RED for two terms, where each term must have a minimum of 18 points. A minimum of 60 points is required for MS.HP. A minimum of 36 points is required for MS. RED. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

TERM 1 (FALL)
REGISTERED MS.HP

HISTORIC PRESERVATION STUDIO I	4 pts
HISTORIC PRESERVATION THEORY AND PRACTICE	3 pts
INTRODUCTION TO ARCHITECTURAL MATERIALS	3 pts
PRESERVATION PLANNING	3 pts
AMERICAN ARCHITECTURE I	3 pts
TOTAL	16 pts

TERM 2 (SPRING)
REGISTERED MS.HP

HISTORIC PRESERVATION STUDIO II	4 pts
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INTRODUCTION TO HISTORIC SYSTEMS AND STRUCTURES	3 pts
AMERICAN ARCHITECTURE II	3 pts
ELECTIVE (MS.HP)	3 pts
ELECTIVE (MS.HP)	3 pts
TOTAL	16 pts

TERM 3 (SUMMER)

REGISTERED MS.RED

REAL ESTATE DEVELOPMENT - PRACTICUM	6 pts
REAL ESTATE FINANCE I - CONCEPTS & MODELS	3 pts
URBAN ECONOMICS / MARKET ANALYSIS	3 pts
HISTORY OF NYC DEVELOPMENT	3 pts
GENERAL ELECTIVE (MS. RED)	3 pts
TOTAL	18 pts

TERM 4 (FALL)

REGISTERED MS.HP

HISTORIC PRESERVATION COLLOQUIUM	3 pts
THESIS I	1 pts
ELECTIVE (MS.HP)	3 pts
ELECTIVE (MS.HP)	3 pts
ELECTIVE (MS.HP)	3 pts
REAL ESTATE FINANCE II - CASE STUDIES	3 pts

TOTAL	16 pts
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TERM 5 (SPRING)
REGISTERED MS.HP

THEESIS II (MS.HP)	4 pts
REAL ESTATE FINANCE III - CAPITAL MARKETS	3 pts
DEVELOPMENT CASE STUDIES (MS.RED)	3 pts
INTERNATIONAL REAL ESTATE DEVELOPMENT CORE	1.5 pts
GENERAL ELECTIVE (MS.RED)	1.5 pts
TOTAL	16 pts

TERM 6 (FALL)
REGISTERED MS.RED

REAL ESTATE LAW	3 pts
CONSTRUCTION MANAGEMENT AND TECHNOLOGY	3 pts
ELECTIVE (MS.HP)	3 pts
TOTAL	18 pts

Urban Planning and Business

The Graduate School of Architecture, Planning, and Preservation and the Columbia Business School offer a dual program leading to the degree of Master of Science in Urban Planning and the degree of Master of Business Administration. A student must enroll for 90 points of credit, which may be earned in six terms in residence - three terms

full-time in the Graduate School of Architecture, Planning, and Preservation and three terms full-time in the Business School. A minimum of 45 points is required for MS.UP. A minimum of 45 points is required for MBA. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

COLUMBIA BUSINESS SCHOOL ADMISSIONS [<http://www8.gsb.columbia.edu/programs-admissions/mba/academics/dual-degrees>]

TERM 1 (FALL)

REGISTERED MS.UP

PLANNING METHODS	3 pts
PLANNING HISTORY AND THEORY	3 pts
ECONOMICS FOR PLANNERS	3 pts
PLANNING LAW	3 pts
SPECIALIZATION: CORE COURSE ELECTIVE	3 pts
GENERAL ELECTIVE/SECTOR SPECIALIZATION	3 pts
TOTAL	18 pts

TERM 2 (SPRING)

REGISTERED MS.UP

PLANNING STUDIO	6 pts
SPECIALIZATION: ELECTIVE	3 pts
SPECIALIZATION: ELECTIVE	3 pts
INTRODUCTION TO GIS	3 pts
GENERAL ELECTIVE/SECTOR SPECIALIZATION	3 pts
TOTAL	18 pts

TERM 3,4,6
REGISTERED MBA

TERM 5 (FALL)
REGISTERED MS.UP

THESIS I (MS.UP)	3 pts
GENERAL ELECTIVE/SECTOR SPECIALIZATION	3 pts
TOTAL	12 -19 pts

TERM 6 (SPRING)
REGISTERED MBA

THESIS II (MS.UP)	3 pts
TOTAL	12-18 pts

Urban Planning and International Affairs

The Graduate School of Architecture, Planning, and Preservation and the School of International and Public Affairs offer a dual program leading to the degree of Master of Science in Urban Planning and the degree of Master of International Affairs. A student must enroll for 90 points of credit, which may be earned in six terms in residence - three terms full-time in the Graduate School of Architecture, Planning, and Preservation and at least three terms full-time in the School of International and Public Affairs. A minimum of 45 points is required for MS.UP. A minimum of 45 points is required for MIA. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

Please consult the Admissions Office at the School of International and Public Affairs for MIA program requirements and details:

SCHOOL OF INTERNATIONAL AND PUBLIC AFFAIRS ADMISSIONS [<http://new.sipa.columbia.edu/miams-urban-planning-dual-degree>]

TERM 1 (FALL)
REGISTERED MS.UP

PLANNING METHODS	3 pts
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PLANNING HISTORY AND THEORY	3 pts
ECONOMICS FOR PLANNERS	3 pts
PLANNING LAW	3 pts
SPECIALIZATION: CORE COURSE ELECTIVE	3 pts
GENERAL ELECTIVE/SECTOR SPECIALIZATION	3 pts
TOTAL	18 pts

TERM 2 (SPRING)
REGISTERED MS.UP

PLANNING STUDIO	6 pts
SPECIALIZATION: ELECTIVE	3 pts
SPECIALIZATION: ELECTIVE	3 pts
INTRODUCTION TO GIS	3 pts
GENERAL ELECTIVE/SECTOR SPECIALIZATION	3 pts
TOTAL	18 pts

TERM 3,4,6
REGISTERED MIA

TERM 5 (FALL)
REGISTERED MS.UP

THESIS I (MS.UP)	3 pts
GENERAL ELECTIVE/SECTOR SPECIALIZATION	3 pts
TOTAL	12 -19 pts

TERM 6 (SPRING)

REGISTERED MIA

THESIS II (MS.UP)	3 pts
TOTAL	12-18 pts

Urban Planning and Law

The Graduate School of Architecture, Planning, and Preservation and the School of Law offer a dual program leading to the degree of Juris Doctor and the degree of Master of Science in Urban Planning. A student must enroll for 119 points of credit, which may be earned in eight terms in residence - two terms full-time in the Graduate School of Architecture, Planning, and Preservation and six terms full-time in the School of Law. A minimum of 36 points is required for MS.UP. A minimum of 83 points is required for JD. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

Please consult the Admissions Office at the Law School for JD program requirements and details:

LAW SCHOOL ADMISSIONS [<http://web.law.columbia.edu/admissions/jd/learn/programming>]

TERM 1 (FALL)

REGISTERED MS.UP

PLANNING METHODS	3 pts
PLANNING HISTORY AND THEORY	3 pts
ECONOMICS FOR PLANNERS	3 pts
PLANNING LAW	3 pts
SPECIALIZATION: CORE COURSE ELECTIVE	3 pts
COURSE (JD)	3 pts
TOTAL	18 pts

TERM 2 (SPRING)
REGISTERED MS.UP

PLANNING STUDIO	6 pts
SPECIALIZATION: ELECTIVE	3 pts
SPECIALIZATION: ELECTIVE	3 pts
INTRODUCTION TO GIS	3 pts
COURSE (JD)	3 pts
TOTAL	18 pts

TERM 3,4,5,6
REGISTERED JD

TERM 7 (FALL)
REGISTERED JD

THESIS I (MS.UP)	3 pts
TOTAL	18 pts

TERM 8 (SPRING)
REGISTERED JD

THESIS II (MS.UP)	3 pts
TOTAL	18 pts

Urban Planning and Public Health

The Graduate School of Architecture, Planning, and Preservation and the Mailman School of Public Health offer a dual program leading to the degree of Master of Science in Urban Planning and the degree of Master of Public Health. A student must enroll for 84 points of credit, which may be earned in five terms in residence - three terms in the Graduate School of Architecture, Planning, and Preservation and two terms in the

minimum of 39 points is required for MPH. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

Please consult the Admissions Office at the Mailman School of Public Health for MPH program requirements and details:

MAILMAN SCHOOL OF PUBLIC HEALTH ADMISSIONS [<http://publichealth.columbia.edu/degree-programs/dual-degrees>]

TERM 1 (FALL)

REGISTERED MS.UP

PLANNING METHODS	3 pts
PLANNING HISTORY AND THEORY	3 pts
ECONOMICS FOR PLANNERS	3 pts
PLANNING LAW	3 pts
SPECIALIZATION: CORE COURSE ELECTIVE	3 pts
COURSE (JD)	3 pts
TOTAL	18 pts

TERM 2 (SPRING)

REGISTERED MS.UP

PLANNING STUDIO	6 pts
SPECIALIZATION: ELECTIVE	3 pts
SPECIALIZATION: ELECTIVE	3 pts
INTRODUCTION TO GIS	3 pts
GENERAL ELECTIVE/SECTOR SPECIALIZATION	3 pts
TOTAL	18 pts

TERM 3 (FALL)
REGISTERED MPH

THESIS I (MS.UP)	3 pts
TOTAL	12-18 pts

TERM 4 (SPRING)
REGISTERED MPH

THESIS II (MS.UP)	3 pts
TOTAL	12-18 pts

TERM 5 (FALL)
REGISTERED MS.UP

GENERAL ELECTIVE / SECTOR SPECIALIZATION	3 pts
TOTAL	12-19 pts

Urban Planning and Social Work

The Graduate School of Architecture, Planning, and Preservation and the School of Social Work offer a dual program leading to the degrees of Master of Science in Social Work and Master of Science in Urban Planning. A student must enroll for 90 points of credit, which may be earned in six terms in residence- three terms in the Graduate School of Architecture, Planning, and Preservation and three terms in the School of Social Work. A minimum of 45 points is required for MS.UP. A minimum of 45 points is required for MSW. Students are responsible for meeting with both program directors periodically to ensure that they are meeting individual program requirements.

Please consult the Admissions Office at the School of Social Work for MSSW program requirements and details:

SCHOOL OF SOCIAL WORK ADMISSIONS [<http://socialwork.columbia.edu/student-resources/special-program-students/dual-degree-programs>]

TERM 1 (FALL)
REGISTERED MS.UP

PLANNING METHODS	3 pts
PLANNING HISTORY AND THEORY	3 pts
ECONOMICS FOR PLANNERS	3 pts
PLANNING LAW	3 pts
SPECIALIZATION: CORE COURSE ELECTIVE	3 pts
COURSE (JD)	3 pts
TOTAL	18 pts

TERM 2 (SPRING)
REGISTERED MS.UP

PLANNING STUDIO	6 pts
SPECIALIZATION: ELECTIVE	3 pts
SPECIALIZATION: ELECTIVE	3 pts
INTRODUCTION TO GIS	3 pts
GENERAL ELECTIVE/SECTOR SPECIALIZATION	3 pts
TOTAL	18 pts

TERM 3,4,6
REGISTERED MSW

TERM 5 (FALL)
REGISTERED MS.UP

THESIS I (MS.UP)	3 pts
GENERAL ELECTIVE/SECTOR SPECIALIZATION	3 pts
TOTAL	12 -19 pts

TERM 6 (SPRING)
REGISTERED MSW

THESIS II (MS.UP)	3 pts
TOTAL	12-18 pts

INTRODUCTION TO ARCHITECTURE: THE SUMMER STUDIO PROGRAM AT COLUMBIA

DIRECTOR: Danielle Smoller

Introduction to Architecture is a preprofessional program for those who are interested in architecture and may be considering it as a career, and for those students who have prior educational experience in design and may wish to complete an additional studio to prepare for application to graduate school. Students must apply online. An official transcript of the applicant's most recent work and a resumé are required. Submission of examples of graphic, photographic, or other design work is encouraged but not required. Applicants should indicate on their application their preference for afternoon or evening studio. When the application is complete, the Office of Admissions will notify the applicant of the admission decision.

A1003 Introduction to Architecture 3 pts
Smoller and Staff

A course comprising studio and lecture formats, presenting a comprehensive experience in architectural design. The course meets five days or evenings a week for five weeks. Utilizing New York City as a laboratory, the morning sessions develop an awareness of the relationships between the history, theory, practice, and design of architecture. Seminars, workshops, and field trips to the offices of prominent professionals, to museums, and to buildings focus on these issues. The afternoon or evening sessions take place in the architecture studio, the basic environment in which architectural education takes place. Students work with studio critics on a series of projects presented by the studio director, presenting their individual designs to juries comprised of faculty and practitioners. Although the studio is structured to allow the development of design skills for those with no prior education in architecture, it also presents the opportunity for students with some background to improve their skills and gain further studio experience. In addition to the seminar and studio portions of the course, there are weekly lectures given by prominent architects from the New York metropolitan area.

THE SHAPE OF TWO CITIES: NEW YORK/PARIS CERTIFICATE PROGRAM

DIRECTOR: Danielle Smoller

Patrick O'Connor, Paris Coordinator

The Shape of Two Cities: New York/Paris Program is the School's program for undergraduate students and recent graduates from colleges and universities around the country. The program's goals are to introduce the fields of architecture, planning, and preservation; encourage their exploration in the contexts of history, theory, and practice; and identify and analyze their interrelationships, especially in regard to the making of cities. The in-depth course of study is suited to students without previous academic experience in design who are interested in architecture, planning, or preservation as a career, students in the liberal arts who are interested in approaching urban and historical issues from an architectural and urban planning perspective, and students with previous design experience who would like to develop additional studio skills in preparation for application to graduate school. All classes are conducted in English.

The program offers a two-semester curriculum that immerses participants in the rich physical and intellectual urban environments of New York and Paris. Instruction draws on the resources of Columbia University and its faculty, and the architectural communities of New York and Paris. During the first semester, students live and study in New York and enjoy the resources of Columbia University and the Graduate School of Architecture, Planning, and Preservation. The second semester is spent in Paris at Reid Hall, Columbia University's center for French studies, located in the heart of the Montparnasse district.

Students in the program enroll in either the Architecture Option or the Urban Studies Option and share in a core of courses while embarking on their specializations. First-term core courses are A6769-History of the American city, A4028- Building New York, and A4027-Architecture, planning, and preservation: New York. Second-term core courses are A4030-The development of Paris, A4031-History of the European city, and A4029-Architecture, planning, and preservation: Paris. These courses ground the program in a rigorous review of urban history and urban form, provide the academic structure for the students' comparative analysis of New York and Paris, and complement the liberal arts curricula of participating colleges.

The Architecture Option combines class and studio work to introduce design, architectural theory, and structural concepts. Through a series of increasingly complex projects that are focused on New York and Paris, design studios emphasize form and space-making and the formulation of public and private spaces as they relate to urban morphology. Representational and analytical drawings and model-making are woven

into studio projects as a means of developing and criticizing design concepts.

The Urban Studies Option emphasizes workshop and seminar work to introduce its fields, which are placed in the contexts of urban and architecture history, historic and contemporary approaches to planning and preservation, and analysis of the social and cultural development of New York and Paris. The first term prepares students to embark on a major independent research project in Paris around a theme developed through discussion with the faculty. This option emphasizes the combination of research and field analysis as a means for developing urban planning and design strategies.

Admissions

The program is designed for students who have at least completed their sophomore year or recent graduates at an accredited college or university. Previous study in architecture, planning, or preservation is not required. Applicants must have the written support of their home institution. To apply for admission, the student should submit the following materials online to the Office of Admissions: application form, official transcript of academic record, letter of recommendation from the major adviser or an academic dean supporting the application to the program and attesting to the student's ability to live and study abroad, and nonrefundable application fee. Admissions decisions are mailed out shortly after all application materials are received.

Program Requirements

All students applying to the program must choose either the Architecture Option or the Urban Studies Option. Each option provides 32 points of course work to be completed in two terms. Courses are taught by faculty members of the Graduate School of Architecture, Planning, and Preservation, and by professional architects, planners, and preservationists in both cities.

TERM 1 (FALL - NEW YORK)

A4027	ARCHITECTURE, PLANNING AND PRESERVATION: NEW YORK	3 pts
A4028	BUIDING NEW YORK	3 pts
A6769	HISTORY OF THE AMERICAN CITY	3 pts
A4000	DESIGN STUDIO (ARCHITECTURE OPTION STUDENTS ONLY)	3 pts

A4043	WORKSHOP IN URBAN STUDIES (URBAN STUDIES OPTION STUDENTS ONLY)	3 pts
	ELECTIVE	3 pts
	TOTAL	15 pts

TERM 2 (SPRING - PARIS)

A4029	ARCHITECTURE, PLANNING AND PRESERVATION: PARIS	3 pts
A4030	THE DEVELOPMENT OF PARIS	3 pts
A4031	HISOTRY OF EUROPEAN CITIES	3 pts
A4010	DESIGN STUDIO (ARCHITECTURE OPTION STUDENTS ONLY)	3 pts
A4044	WORKSHOP IN URBAN STUDIES (URBAN STUDIES OPTION STUDENTS ONLY)	3 pts
	FRENCH SEMINAR	3 pts
	TOTAL	15 pts

Courses of Instruction

TERM I: NEW YORK

A4043	Urban Studies Workshop	4 pts
Staff		

Reading and discussions focused on issues and theories of urban planning. Data and site analyses of the New York City district guide students in their development of a planning intervention.

A4000	Design Studio	4 pts
Smoller and Staff		

Introductory studio on the analysis, representation, and design of architectural projects for New York City. The studio combines long-term projects with sketch problems. Tutorials and lectures on graphics skills.

A4027 Architecture, Planning, and Preservation: New York 3 pts
Buttenwieser and Willis

A survey of past and present work in the three disciplines that emphasizes their interdisciplinary nature. Guest lecturers represent public and private efforts in New York's planning, design, and historic preservation. Special attention is paid to the theories of design, planning, and historic preservation that have shaped the 20th-century city. Class projects are prepared by teams that include members from both architecture and urban design options.

A4028 Building New York 3 pts
Dolkart

The evolution of building form and urbanism in New York City, 19th century to the present, as demonstrated by a survey of the city's building types, 19th century to the present, and including residential, commercial, and institutional architecture: Based on lectures and tours.

A6769 History of the American City 3 pts
Wright

The process of continuity and change in American cities from the colonial period through the 20th century, covering industrialization, political conflict, reform movements, geographical and ethnic diversity, bureaucratic rationalism, and urban culture, with focus on how physical form responded to or influenced social and political forces over time.

TERM II: PARIS

A4010 Design Studio 4 pts
Staff

Analysis and design exercises lead students from an understanding of Paris as a city to an architectural proposal for a specific site.

A4029 Architecture, Planning, and Preservation: Paris 3 pts
Staff

An examination of theories and practices of architecture, planning, and preservation in Paris and its region, focusing on 20th-century and contemporary developments.

A4030 The Development of Paris 3 pts
Staff

A discussion of the 2,000-year development of Paris through a combination of lectures

and site visits. Emphasis on the interrelationship between the evolution of architecture and the urban fabric.

A4031 History of European Cities 3 pts
Staff

Focus on the historical development of the physical form, architecture, and infrastructure of European cities. Cultural, social, and political contexts of the development of European cities are reviewed, as are the procedures used to reorganize the cities' forms over time.

A4044 Urban Studies Workshop 4 pts
Staff

A sequence of exercises introduces students to different modes of urban analysis. A reflexive “reading” of the city accompanies the student’s own site research as they address a specific urban problematic.

ADMISSION PROCEDURES AND REQUIREMENTS

Applicants should consult the admissions requirements detailed separately for each program in this bulletin. Applications are only accepted via Apply Yourself online. Please consult the GSAPP Web site (www.arch.columbia.edu) and link to admissions. Applications should be completed in accordance with the instructions accompanying them. It is the applicant's responsibility to collect all the supporting materials (transcripts and letters of recommendation). A personal statement is required of all applicants. Information on additional required supporting materials is listed under the degree offered. The Admissions Office will not accept applications or supporting materials via facsimile machine.

APPLICATION DEADLINES FOR DEGREE CANDIDATES

Fall term: Applications and all supporting material for the Master of Architecture Program must be received by December 15. Scholarship applications must be received by the same date.

For applications to all other programs except the Ph.D., the deadline is January 15. The deadline for the Ph.D. Programs is January 1. (See the Ph.D. Program section of this bulletin for further information.) Ph.D. Application materials should be requested from the Graduate School of Arts and Sciences (212-854-4737) (107 Low Library).

There are no spring term admissions.

SPECIAL STUDENTS

Fall term: Applications must be received by August 1.

Spring term: Applications must be received by December 15.

No application is forwarded to the Committee on admissions until all supporting documents and materials have been received. It is the applicant's responsibility to make sure that all of the materials he or she has requested and submitted have been received prior to the deadline for receipt of applications.

DEPOSIT

Admissions decisions are mailed on or before April 1. An applicant who has been accepted for admission as a degree candidate is required to pay a \$700 deposit to the University within fifteen days after receiving the notice of acceptance. This deposit is applied toward tuition when the applicant registers; if the applicant does not register, the deposit is not refunded. Credit for the deposit may be extended for twelve months when

an applicant fails to register because of illness. Proof of illness is required.

If the fee is not paid within fifteen days after receiving the notice of acceptance, the applicant forfeits the place in the School that has been reserved for him or her.

An applicant who does not accept his or her place in the School for the year admitted can reactivate the application for the following year by writing to the Office of Admissions before the admissions deadline. Readmission is not automatic.

International Students

In addition to the general admissions requirements, international students (1) who can understand rapid idiomatic English and can speak, write, and read English with a high degree of facility and (2) who can prove their ability to support themselves financially while in the United States are eligible for admission to Columbia. International students requiring a visa in order to study in the United States must consult and coordinate with the Columbia University International Students and Scholars Office (ISSO). Information about ISSO can be found at <http://isso.columbia.edu/>.

Students whose native language is not English or who did not receive their education in an English-speaking country should make arrangements to take the Test of English as a Foreign Language (TOEFL). Inquiries about this test, which is administered four times annually throughout the world, should be addressed to TOEFL/TSE Services, P.O. Box 6151, Princeton, NJ 08541-6151, U.S.A.; telephone 609-771-7100; e-mail toefl@ets.org. The minimum TOEFL score for admission is 600 PBT, 250 CBT, 100 iBT. The GSAPP does not accept the IELTS in lieu of the TOEFL.

STUDENTS APPLYING FROM WITHIN THE UNITED STATES

Students applying from within the United States, whether nonimmigrants or immigrants (permanent residents), should follow the standard application procedures. If applying from outside the New York City area, students whose native language is not English or who did not receive their education in an English-speaking country should make arrangements to take the Test of English as a Foreign Language (TOEFL). Applicants are urged to make arrangements to take the examination early. If applying from within or near the New York City area, students must take the English Language Placement Test (in lieu of the TOEFL) at the Columbia University American Language Program, unless exempted by GSAPP. Students who are required to take the English Language Placement Test should do so as early as possible. The test can be taken during the last week of August. Test schedules are available in 505 Lewisohn.

FINANCIAL AID FOR INTERNATIONAL STUDENTS

The Graduate School of Architecture, Planning, and Preservation does not provide financial aid for international students. Students needing financial aid who reside in countries that have a United States Educational (Fulbright) Commission should apply

through the Commission. Information about the Commission and about Fulbright grants (both travel and full-support grants) may be obtained from the nearest United States Embassy, Consulate, or Information Service. Students in Great Britain who wish to request financial aid should apply through the English-Speaking Union, 37 Charles Street, London W1X-8AB, England.

ORIENTATION PROGRAM FOR NEW INTERNATIONAL STUDENTS

The orientation program for new international students arriving for the September term takes place during orientation week, usually either the last week in August or the first week in September. For further information, consult the International Students and Scholars Office (ISSO), telephone: 212-854-3587; website: isso.columbia.edu; mailing address: International Students and Scholars Office, Columbia University, Mail Code 5724, 2960 Broadway, New York, NY 10027. Students wishing to visit the ISSO are invited to stop by at 524 Riverside Drive.

The International Students and Scholars Office (ISSO) offers many services for international students as well as American citizens and permanent residents who have studied in a foreign country. Services for international students include preadmission counseling, immigration-related and document services, International Orientation, social and cultural activities, and a program for the spouses of students. The ISSO also provides credential analysis services to the admission offices of the University. The ISSO is open year-round, and international students are urged to make use of its services during their stay at the University.

The ISSO staff is available for personal advisement and for help in learning about the campus and New York City. The ISSO is an essential source of information regarding immigration and Department of State regulations that affect international students studying in the United States. The staff can also assist with many other nonacademic matters. The ISSO provides information about the many cultural activities in the New York area and has reduced-rate tickets for plays, concerts, and other events.

Students are required to check in with the ISSO within a week of their arrival at Columbia. Orientation for new international students arriving for the fall term takes place usually either the last week in August or the first week in September. Visit the ISSO at 524 Riverside Drive (in International House North, just north of 122nd Street); call 212-854-3587; e-mail isso@columbia.edu; and visit online at www.isso.columbia.edu/.

SPECIAL STUDENTS

Professionals in fields related to architecture may be eligible to take courses in the Graduate School of Architecture, Planning, and Preservation. These students must be admitted by the Office of the Associate Dean for Admissions as special students (nondegree candidates). Many courses, including the design studios, drawing courses, and seminars, are not open to special students.

If at a later date a special student wishes to apply for matriculation in any of the graduate degree programs, the student must file a formal application before the stipulated deadline. The Admissions Committee does not treat the applicant preferentially.

TUITION AND FEES

Application for admission as a degree candidate \$75

ESTIMATED EXPENSES

TUITION RATE

The following fees, prescribed by statute, are estimated to be in effect for 2014-2015. These fees are subject to change at any time at the discretion of the Trustees.

University charges such as tuition and fees and residence halls and board plans are due and payable in full by the date announced before the beginning of each term. If partial payments are made, a late payment charge is assessed on amounts not paid by the due date on the initial statement made available to you online prior to registration, and, thereafter, as indicated on subsequent online statements.

It is the policy of the University to withhold registration/change of programs, diplomas, certificates, and transcripts until all financial obligations have been met. Candidates for graduation are urged to settle their accounts at least one month prior to graduation. In the event a diploma, certificate, or transcript is withheld because of an unpaid balance, a student may be required to use a certified check, money order, or cash to release any of the aforementioned documents.

Degree Programs	
Tuition, per semester:	\$24,360 12-19pts

Non-degree Programs	
NY/Paris, per semester:	\$16,500 12-19 pts
Introduction to Architecture	\$3,300
Special Student, Part-time	\$1,624 per pt
Special Student, Full-time	\$24,360 12-19pts

UNIVERSITY FEES

General Fees (automatically assessed at registration) (2013-2014)

International Services Charge	\$50 per term
Transcript Fee (required)	\$105 one time
University Facilities Fee (required)	TBA

International Service Charge

For students with nonresident visas

Per term (fall and spring): \$50

Late Registration Fees

During late registration \$50

After late registration \$100

HEALTH SERVICE FEE

Services and programs offered by Health Services at Columbia (HSC) are supported by the Health Service fee. Students who have paid the fee pay no additional charges when using services provided on campus, except for charges for immunizations and travel assessments. University policy requires all registered full-time and residential students to have acceptable health insurance coverage and pay the fee. In addition to the services available on campus, HSC arranges for students who have paid the fee to obtain coverage for certain important services from off-campus providers when necessary. There are limits and restrictions on this coverage. Please review the full program descriptions and directions for utilizing the benefits at www.health.columbia.edu.

Health Service Fees (required) 2013-2014*

Fall: \$429 Spring (incl. Summer): \$429

*This fee is subject to approval each year by the Board of Trustees of Columbia University. Check www.health.columbia.edu for up-to-date Summer Health Service fee. Students registering for a full-time course load in either Summer Session I or II are automatically enrolled in the Summer Health Service Program and are required to pay the Summer Health Service fee. Other students, including May graduates, who wish to maintain their Health Service eligibility between June 1 and August 31 may elect to enroll in the Summer Health Service Program.

MEDICAL INSURANCE PLAN

University policy requires all registered full-time and residential students to have acceptable health insurance coverage. Columbia University offers the Student Medical Insurance Plan, which provides both Basic and Comprehensive levels of coverage. Full-time students are automatically enrolled in the Basic level of the Plan and billed for the insurance premium in addition to the Health Service fee. Part-time students may elect enrollment in the Health Services Program and in the medical insurance plan. For detailed information about medical insurance coverage options and directions for confirming enrollment, upgrading coverage, or submitting a waiver request, visit www.health.columbia.edu.

Medical Insurance fees 2013-2014*

Medical Insurance Plan Premiums: Basic
Fall: \$892 Spring (incl. Summer): \$1,399

Medical Insurance Plan Premiums: Comprehensive
Fall: \$1,229 Spring (incl. Summer): \$1,928

*Student Medical Insurance Plan rates and benefits change annually. For up-to-date information, please check the Health Services at Columbia Web site (www.health.columbia.edu), where updates will be posted regularly.

WITHDRAWAL AND ADJUSTMENT OF FEES

Any student withdrawing from the GSAPP must file an official notice of withdrawal in the Admissions Office as soon as possible; any adjustment of the tuition that the student has paid is reckoned from the effective date of withdrawal. (For partial withdrawal, see Changes in Programs of Study, above.)

The application and late fees are not refundable. Health Service, medical insurance, and special fees are refundable if notice of withdrawal is received by the Admissions Office by the last day of the change-of-program period. For 2013-2014, those dates are September 15 (fall term) and January 31 (spring term). In all cases, a withdrawal fee of \$75 will be assessed.

After the last day to change programs in each term (see Academic Calendar), the above amount is retained plus an additional percentage of the remaining tuition (as indicated in the adjustment schedule below) for each week, or part of a week, that the student remains registered after these dates. The student is considered registered until the date on which the student's written notice of withdrawal is received by the Office of Admissions.

WITHDRAWAL SCHEDULE

The refund percentage is as follows:

Term Week : Fall and Spring Term 2013-2014

Week 1 & Week 2 : 100%

Through the end of the Change of Program Period: 100% tuition and fees (except transcript fee) refunded

Week 3 : 90% tuition refunded, no fees refunded

Week 4 : 80% tuition refunded, no fees refunded

Week 5 : 70% tuition refunded, no fees refunded

Week 6 60% tuition refunded, no fees refunded

Week 7 : 50% tuition refunded, no fees refunded

Week 8 : 40% tuition refunded, no fees refunded

After Week 8 : 0%

(Note: when a term begins on a Tuesday, the term week goes from Tuesday to Monday)

FINANCIAL AID

The goal of the School's program of financial assistance is to provide financial aid to U.S. citizens and permanent residents who have demonstrated need consistent with University guidelines. Financial need is met through a combination of grants and/or loans. An entering student who receives a scholarship grant should be able to meet, through a combination of the grant, loan funds, family contributions, summer earnings, and other resources, all expenses through the academic year. The need of a student is determined by assessing all possible resources including the student's own resources, those of his or her spouse, if any, and a parental contribution where applicable. From these resources, a student's estimated expenses are deducted; the difference becomes the student's "need."

In subsequent years a student who continues to have financial need and continues to achieve a satisfactory record will qualify for a continuation of financial aid. A new application must be made each year. A scholarship grant is applied as a credit toward tuition: one half at registration for the fall term, the other half at registration for the spring term.

Scholarships-University GSAPP

In order to be considered for a scholarship, applicants should submit the scholarship application of the Graduate School of Architecture, Planning, and Preservation to the Admissions Office at the time they apply to the School. The deadline for financial aid applications for continuing students is April 1.

A financial aid application can be considered only if it is accompanied by IRS forms 1040 from student, spouse, and parents. In view of limited financial aid resources, an applicant's assertion of self-support or emancipation is not recognized in awarding scholarship grants. All students who receive scholarships must be registered for a minimum of 12 credits per semester.

LOANS AND FEDERAL FINANCIAL AID

Students and applicants applying for any of the Federal Student Aid Programs described in this section must submit a Free Application for Federal Student Aid (FAFSA) to the Federal Student Aid Programs' Processing Center no later than February 15. Students and applicants should use estimated income figures when completing this form if a tax return has not already been filed. In addition, it is very important that the Graduate School of Architecture's school code (E00115) be entered in the School Release section of this form. All questions may be directed to Student Financial Planning at 212-854-7040.

FEDERAL STAFFORD LOAN (SUBSIDIZED)

The Federal Stafford Loan is a federally insured, federally subsidized loan obtained through a participating lender. Graduate students may borrow up to \$8,500 per year. Repayment of interest and principal is deferred until six months after the student ceases at least half-time registration. Eligibility for a subsidized Federal Stafford Loan is limited to U.S. citizens and permanent residents who demonstrate need through submission of the Free Application for Federal Student Aid (FAFSA). Students will be advised of application procedures when they receive their financial aid award notification.

FEDERAL STAFFORD LOAN (UNSUBSIDIZED)

This is a non-need-based loan that allows students who are eligible for \$8,500 in subsidized Federal Stafford Loan to borrow up to an additional \$12,000 per year. Students not eligible for a subsidized Federal Stafford Loan may borrow up to \$20,500 with this loan. The total combined borrowing limit under subsidized/unsubsidized Stafford Loan is \$20,500. Interest on Unsubsidized Federal Stafford Loan funds must be paid or capitalized during in-school and deferment periods. Principal is deferred until six months after the student ceases at least halftime registration. Eligibility is limited to U.S. citizens and permanent residents who have filed a Free Application for Federal Student Aid (FAFSA). Students will be advised of application procedures when they receive their financial aid award notification.

PERKINS LOAN

A limited amount of Federal Perkins Loan funds is available for students who are U.S. citizens or permanent residents and who demonstrate exceptional financial need. Eligible students will be notified in their financial aid award letter. Repayment of principal and interest begins nine months after the student ceases at least half-time registration. Students who are awarded funds must complete Perkins promissory notes at 208 Kent Hall.

SATISFACTORY ACADEMIC PROGRESS

Students receiving any Federal Financial Aid described in this section must demonstrate satisfactory academic progress in order to retain eligibility. The standards established to determine satisfactory academic progress for Federal Financial Aid recipients are the same as those for students not receiving Federal Financial Aid. Please refer to the following sections in this bulletin: Matriculation and Facilities, Withdrawal and Adjustment of Fees, Academic Standing, and Grades, for specific school policy. The Committee on Student Performance is an appeals committee acting on all matters involving students with unsatisfactory academic records. Appeals may be directed to this committee through the Office of the Dean. Students who are reinstated upon appeal will automatically be reconsidered for Federal Financial Aid.

SOCIAL SECURITY NUMBER REPORTING

To comply with Internal Revenue Service mandates, Columbia University requires students who will be receiving financial aid or payment through the University payroll system to report their Social Security number at the time of admission.

National, Regional, and Foundation Fellowships

AMERICAN INSTITUTE OF ARCHITECTS - AMERICAN INSTITUTE OF ARCHITECTS FOUNDATION SCHOLARSHIPS PROGRAM

Applications and information may be obtained from the American Institute of Architects, Scholarships Program, 1735 New York Avenue, N.W., Washington, DC 20006. The deadline for filing applications is usually December 31.

THE AMERICAN ASSOCIATION OF UNIVERSITY WOMEN gives fellowships to women for their last year of enrollment in professional schools. The deadline date is December 15 before the final year of graduate studies. Applications can be obtained from: AAUW, 2401 Virginia Avenue, N.W., Washington, DC 20037.

NEW YORK STATE REGENTS COLLEGE TEACHING FELLOWSHIPS

Annual predoctoral fellowships are open to legal residents of New York State for doctoral study in preparation for college teaching. Recipients must indicate their intent to teach in an institute of higher learning within the state upon graduation. Applications may be obtained from the New York State Higher Education Service Corporation, 99 Washington Avenue, Albany, NY 12255, and are due December 1.

PUBLIC HEALTH SERVICE FELLOWSHIPS

Predoctoral fellowships are available to students in the basic sciences or the social sciences for work relating to problems of health and disease. Applications are obtained by writing to the Chief, Career Development Review Branch, Division of Research Grants, National Institutes of Health, Bethesda, MD 20014, and are due by December 1. Students should consult the Foundation Directory for Grants to Individuals, which is available in the Admissions Office.

NEW YORK STATE TUITION ASSISTANCE PROGRAM (TAP)

Any student who can prove legal residency in New York State for the preceding year should apply for a TAP award for each term in which he or she is registered as a full-time degree candidate. The amount of this award is based on the net taxable balance of the student's income and the income of those responsible for his or her support, as reported on the New York State income tax return for the previous calendar year. Applications and further information can be obtained from the New York State Higher Education Service Corporation, 99 Washington Avenue, Albany, NY 12255, or from the Financial Aid Office at the GSAPP.

GSAPP STUDENT AWARDS

SCHOOL-WIDE PRIZES

All prizes will be announced at the School Commencement ceremony.

ALI JAWAD MALIK MEMORIAL HISTORY/THEORY HONOR AWARD

Graduating students in all programs are eligible. This award is in recognition of the high quality of work in the history/theory sequence. Submit two or more papers on architectural history written for GSAPP or Art History Dept. courses with the instructor's comments (if possible) to the Dean's Office.

GSAPP WRITING PRIZE

GSAPP will award a writing prize to a graduating student for an outstanding essay, paper, or thesis on the history or theory of architecture written for a class during his/her time enrolled at GSAPP. This is a school-wide prize; all graduating students are eligible. Students should submit one essay, paper, or thesis that they consider strongest (and best written) to the Dean's office.

WILLIAM KINNE FELLOWS TRAVELING PRIZE

These awards are granted on the merit of proposals submitted for travel abroad incorporating the study of architecture, including planning and other specialized aspects of architecture. Please see Kinne Prize website for more information and submission instructions: <http://www.arch.columbia.edu/kinne>

MASTER OF ARCHITECTURE (M.ARCH)

The portfolios that M.Arch, AAD, & UD students are required to submit to graduate are used to assist the Committees in determining the recipients of these awards. Portfolios should be submitted to the Dean's Office. All awards will be announced at the School Commencement ceremony.

HONOR AWARDS FOR EXCELLENCE IN DESIGN

Graduating students in M.Arch, AAD & UD are eligible. The prize is for high quality of work in the design studios during the student's program of studies at Columbia.

CHARLES MCKIM PRIZE FOR EXCELLENCE IN DESIGN / SAUL KAPLAN TRAVELING FELLOWSHIP

Graduating students in M.Arch are eligible. This prize is awarded to recognize the student whose work throughout the studios has been outstanding and is funded by a bequest from Saul Kaplan (M.Arch '57). The prize is for travel and study following graduation.

ALPHA RHO CHI MEDAL

Graduating students in M.Arch are eligible. This prize is for the student who has shown ability in leadership over the past 2-3 years in the School and who gives promise of professional merit through his/her attitude and personality.

AMERICAN INSTITUTE OF ARCHITECTS HENRY ADAMS MEDAL AND CERTIFICATE

Graduating students in M.Arch are eligible. These prizes are awarded to the students who have maintained the best general standard in all sequences during the professional course over the past 2-3 years in the School.

AWARD FOR EXCELLENCE IN TOTAL DESIGN

Graduating students in M.Arch are eligible. The prize is for excellence in total design.

BUILDING TECHNOLOGIES HONOR AWARD

Graduating students in M.Arch are eligible. This award is awarded to the student who most demonstrates an ability to incorporate building science and technologies into the issues of architectural design. Selection for this award is based on a combination of grades from the core architectural technologies courses (AT1 through AT5), building science and technology elective coursework, as well as portfolio review. Applying students' end of year portfolios should include work from advanced Building Science and Technologies courses.

SCHOOL SERVICE AWARD

This prize is awarded to a graduating student who has performed willing service to the School, and gives promise of real professional merit through attitude and character. It is intended as a recommendation of high ideals and professional aspirations.

'AVERY 6' AWARD

1. This student-nominated prize is awarded to the graduating M.Arch student whose work questions the standards of architecture and promises to change the profession.
2. This student-nominated prize is awarded to the graduating M.Arch student whose commitment within studio and the school at large has earned the respect of the student body.

VISUAL STUDIES AWARD

Computing/Media/Design award. Graduating students in M.Arch, AAD, UD & CCCP are eligible. This prize is for innovative use of computing media in architectural research, design and fabrication. This may include spatial explorations, which involve simulations/animations, multimedia scripting, interactive environments/interfaces, or fabrication. Students who wish to be considered for this prize should submit their projects on CD-ROM, DVD or as a website URL to the Dean's Office. Award is announced at graduation.

LUCILLE SMYSER LOWENFISH MEMORIAL PRIZE

Graduating students in M.Arch, AAD & UD are eligible. This award is given to the graduating students who submit the best final semester design problem in each studio section. Decision is made by studio critic prior to commencement.

PERCIVAL AND NAOMI GOODMAN FELLOWSHIP

The purpose of the Fellowship is to enable the recipient to carry out a project of social significance related to the interests of Percival Goodman. Projects should be strongly humanist and excite the possibility that lives can be changed for the better. The amount of the award is \$20,000. The project may be undertaken anywhere in the world. It may last up to one year after graduation and must be concluded with a final report. To be eligible for consideration, applicants must currently be completing an M. Arch, A.A.D., Urban Planning, Urban Design, Historic Preservation or Critical, Curatorial and Conceptual Practices degree at GSAPP, or an undergraduate degree in architecture at Columbia or Barnard College. Please see the Goodman Fellowship website for more information and application instructions.

URBAN DESIGN (AUD)

The portfolios that M.Arch, AAD, & UD students are required to submit to graduate are used to assist the Committees in determining the recipients of these awards. Portfolios should be submitted to the Dean's Office. All awards will be announced at the School Commencement ceremony.

HONOR AWARDS FOR EXCELLENCE IN DESIGN

Graduating students in M.Arch, AAD & UD are eligible. The prize is for high quality of work in the design studios during the student's program of studies at Columbia.

GSAPP PRIZE FOR EXCELLENCE IN URBAN DESIGN

To recognize the student whose work in the Urban Design Program has been most outstanding.

WILLIAM WARE PRIZE FOR EXCELLENCE IN DESIGN / SAUL KAPLAN TRAVELING FELLOWSHIP

Graduating students in AAD and UD are eligible. This prize is awarded to recognize the student whose work in the studios has been outstanding and is funded by a bequest from Saul Kaplan (M.Arch '57). The prize is for travel and study following graduation.

VISUAL STUDIES AWARD

Computing/Media/Design award. Graduating students in M.Arch, AAD, UD & CCCP are eligible. This prize is for innovative use of computing media in architectural research, design and fabrication. This may include spatial explorations, which involve simulations/animations, multimedia scripting, interactive environments/interfaces, or fabrication. Students who wish to be considered for this prize should submit their

projects on CD-ROM, DVD or as a website URL to the Dean's Office. Award is announced at graduation.

LUCILLE SMYSER LOWENFISH MEMORIAL PRIZE

Graduating students in M.Arch, AAD & UD are eligible. This award is given to the graduating students who submit the best final semester design problem in each studio section. Decision is made by studio critic prior to commencement.

PERCIVAL AND NAOMI GOODMAN FELLOWSHIP

The purpose of the Fellowship is to enable the recipient to carry out a project of social significance related to the interests of Percival Goodman. Projects should be strongly humanist and excite the possibility that lives can be changed for the better. The amount of the award is \$20,000. The project may be undertaken anywhere in the world. It may last up to one year after graduation and must be concluded with a final report. To be eligible for consideration, applicants must currently be completing an M. Arch, A.A.D., Urban Planning, Urban Design, Historic Preservation or Critical, Curatorial and Conceptual Practices degree at GSAPP, or an undergraduate degree in architecture at Columbia or Barnard College. Please see the Goodman Fellowship website for more information and application instructions.

ADVANCED ARCHITECTURAL DESIGN (AAD)

The portfolios that M.Arch, AAD, & UD students are required to submit to graduate are used to assist the Committees in determining the recipients of these awards. Portfolios should be submitted to the Dean's Office. All awards will be announced at the School Commencement ceremony.

HONOR AWARDS FOR EXCELLENCE IN DESIGN

Graduating students in M.Arch, AAD & UD are eligible. The prize is for high quality of work in the design studios during the student's program of studies at Columbia.

WILLIAM WARE PRIZE FOR EXCELLENCE IN DESIGN / SAUL KAPLAN TRAVELING FELLOWSHIP

Graduating students in AAD and UD are eligible. This prize is awarded to recognize the student whose work in the studios has been outstanding and is funded by a bequest from Saul Kaplan (M.Arch '57). The prize is for travel and study following graduation.

VISUAL STUDIES AWARD

Computing/Media/Design award. Graduating students in M.Arch, AAD, UD & CCCP are eligible. This prize is for innovative use of computing media in architectural research, design and fabrication. This may include spatial explorations, which involve simulations/animations, multimedia scripting, interactive environments/interfaces,

or fabrication. Students who wish to be considered for this prize should submit their projects on CD-ROM, DVD or as a website URL to the Dean's Office. Award is announced at graduation.

LUCILLE SMYSER LOWENFISH MEMORIAL PRIZE

Graduating students in M.Arch, AAD & UD are eligible. This award is given to the graduating students who submit the best final semester design problem in each studio section. Decision is made by studio critic prior to commencement.

PERCIVAL AND NAOMI GOODMAN FELLOWSHIP

The purpose of the Fellowship is to enable the recipient to carry out a project of social significance related to the interests of Percival Goodman. Projects should be strongly humanist and excite the possibility that lives can be changed for the better. The amount of the award is \$20,000. The project may be undertaken anywhere in the world. It may last up to one year after graduation and must be concluded with a final report. To be eligible for consideration, applicants must currently be completing an M. Arch, A.A.D., Urban Planning, Urban Design, Historic Preservation or Critical, Curatorial and Conceptual Practices degree at GSAPP, or an undergraduate degree in architecture at Columbia or Barnard College. Please see the Goodman Fellowship website for more information and application instructions.

CRITICAL, CURATORIAL, AND CONCEPTUAL PRACTICES (CCCP)

All awards will be announced at the School Commencement ceremony.

CCCP THESIS AWARD

1. For the thesis exhibiting the most rigorous conceptual development and the most complementary format or medium.
2. For the thesis making the most significant contribution to the public sphere and which includes a realized component.

CCCP PROGRAM AWARD

This prize is for high academic attainment.

VISUAL STUDIES AWARD

Computing/Media/Design award. Graduating students in M.Arch, AAD, UD & CCCP are eligible. This prize is for innovative use of computing media in architectural research, design and fabrication. This may include spatial explorations, which involve simulations/animations, multimedia scripting, interactive environments/interfaces, or fabrication. Students who wish to be considered for this prize should submit their projects on CD-ROM, DVD or as a website URL to the Dean's Office. Award is announced at graduation.

PERCIVAL AND NAOMI GOODMAN FELLOWSHIP

The purpose of the Fellowship is to enable the recipient to carry out a project of social significance related to the interests of Percival Goodman. Projects should be strongly humanist and excite the possibility that lives can be changed for the better. The amount of the award is \$20,000. The project may be undertaken anywhere in the world. It may last up to one year after graduation and must be concluded with a final report. To be eligible for consideration, applicants must currently be completing an M. Arch, A.A.D., Urban Planning, Urban Design, Historic Preservation or Critical, Curatorial and Conceptual Practices degree at GSAPP, or an undergraduate degree in architecture at Columbia or Barnard College. Please see the Goodman Fellowship website for more information and application instructions.

URBAN PLANNING (UP)

All awards will be announced at the School Commencement ceremony.

AMERICAN INSTITUTE OF CERTIFIED PLANNERS OUTSTANDING STUDENT AWARD

This prize is for outstanding attainment in the study of Urban Planning.

NEW YORK CHAPTER OF THE AMERICAN PLANNING ASSOCIATION'S AWARD

This award is for academic excellence and leadership in Urban Planning.

CHARLES ABRAMS THESIS AWARD

For a thesis that best exemplifies a commitment to social justice.

URBAN PLANNING PROGRAM AWARD

This prize is for high academic attainment.

PLANNING CHALLENGE AWARD

For a thesis that makes a substantive contribution to our understanding of a contemporary planning issue.

PLANNING RESEARCH DESIGN AWARD

For a thesis that exemplifies a commitment to research methodology and/or planning techniques.

PEER TO PEER AWARD

This award is given in recognition of outstanding service to classmates, faculty, and school.

PERCIVAL AND NAOMI GOODMAN FELLOWSHIP

The purpose of the Fellowship is to enable the recipient to carry out a project of social significance related to the interests of Percival Goodman. Projects should be

strongly humanist and excite the possibility that lives can be changed for the better. The amount of the award is \$20,000. The project may be undertaken anywhere in the world. It may last up to one year after graduation and must be concluded with a final report. To be eligible for consideration, applicants must currently be completing an M. Arch, A.A.D., Urban Planning, Urban Design, Historic Preservation or Critical, Curatorial and Conceptual Practices degree at GSAPP, or an undergraduate degree in architecture at Columbia or Barnard College. Please see the Goodman Fellowship website for more information and application instructions.

HISTORIC PRESERVATION (HP)

All awards will be announced at the School Commencement ceremony.

HISTORIC PRESERVATION FACULTY AWARDS FOR OUTSTANDING THESIS

One per sector in History/Theory, Planning, Design, and Conservation. Thesis advisor makes recommendation.

PEER TO PEER AWARD

This award is given in recognition of outstanding service to classmates, faculty, and school.

PERCIVAL AND NAOMI GOODMAN FELLOWSHIP

The purpose of the Fellowship is to enable the recipient to carry out a project of social significance related to the interests of Percival Goodman. Projects should be strongly humanist and excite the possibility that lives can be changed for the better. The amount of the award is \$20,000. The project may be undertaken anywhere in the world. It may last up to one year after graduation and must be concluded with a final report. To be eligible for consideration, applicants must currently be completing an M. Arch, A.A.D., Urban Planning, Urban Design, Historic Preservation or Critical, Curatorial and Conceptual Practices degree at GSAPP, or an undergraduate degree in architecture at Columbia or Barnard College. Please see the Goodman Fellowship website for more information and application instructions.

REAL ESTATE DEVELOPMENT (RED)

HANK BELL ENTREPRENEURIAL AWARD

This award is for the student that best embodies Professor Emeritus Hank Bell's entrepreneurial spirit.

THESIS AWARD

In recognition of the well-researched and crafted thesis.

SERVICE AWARD

This award is for student participation and leadership within the RED Program.

SCHOLASTIC PERFORMANCE

This award is for high academic attainment.

ARCHIVES, EXHIBITIONS, AND PUBLICATION OF STUDENT DESIGN WORK

At the conclusion of each project in the studios, each studio critic selects at least two student projects for recording in the Archives and for possible display in revolving exhibitions within the School. The studio critic notifies each selected student and then gives their names (along with the names of the projects) to the teaching assistant, who oversees the following: 1. The works are recorded (models photographed by the archive photographer; drawings to be sent out for reduction/reproduction by the teaching assistant). In all cases the student is expected to finish the models and the drawings in such a way that they are suitable for documentation. 2. Each year in May the works are considered for display in Avery and Buell Halls. *Abstract*, the yearly publication of student work in the studios of the School, is drawn from the holdings of the Archives. Several drawings from the year-end exhibition of student work are selected by the dean, the program director, and the Avery librarian for inclusion in the permanent Avery Architectural Drawings Collection. The School reserves the right to make a copy (photograph or print) of any work submitted for credit. Every effort will be made to produce these copies in a timely manner, but the student's work will be considered the property of the School until this process can be accomplished. The material in the Archives is not available to students for reproduction. Students are responsible for documenting their own work and for maintaining a portfolio, updated after each term.

STUDENT EMPLOYMENT

FEDERAL WORK-STUDY PROGRAM

The Federal Work-Study Program was established to aid U.S. citizens and permanent residents who need to work in order to meet school expenses. Eligibility for this program depends on financial need as determined by a federally mandated need analysis for which the FAFSA (see Federal Stafford Loan, above) is required. Each year Columbia students fill many on-campus positions, as well as jobs in off-campus public and nonprofit organizations, through funds allocated to this program. Employment in this program is restricted to twenty hours a week during the academic year. Students may work full-time during the summer and vacation periods. Students who will begin graduate work during the regular academic year may hold work-study positions during the summer prior to their first registration.

TEACHING ASSISTANTSHIPS

Teaching assistantships and readerships are available to all matriculated students who are registered for a minimum of 12 points. Assistants help faculty members in instruction and in administration. Assignments may change from year to year; areas in which assistantships are generally given include: design studio; drawing; computers; building technology; history/theory; conservation; photography/darkroom; slide library; model shop; exhibitions; planning workshop; publications.

Compensation consists of a combination of a tuition award and a stipend. Applications are made available by the Dean's Office during the spring of each year for positions in the subsequent fall term and for some full-year assistantships; applications may also be solicited in the fall term for positions available in the coming spring term.

TAX WITHHOLDING FOR NONRESIDENT ALIEN TEACHING ASSISTANTSHIP RECIPIENTS

United States tax law requires the University to withhold tax at the rate of 14 percent on fellowship grants paid to nonresident aliens that exceed the cost of tuition, books, fees, and related classroom expenses.

Certain countries have entered into tax treaties with the United States, which may serve to reduce this rate of withholding. However, even when such a treaty applies, the student and the University must report the full amount of such excess to the Internal Revenue Service. If a student claims tax treaty benefits, he or she must also report this amount to his or her country of residence.

The tax law is complex and may vary with regard to individual circumstances. Therefore, as the University is not in a position to offer individual tax advice, each student may also wish to consult the consulate of his or her country of residence or a qualified tax

professional.

WITHDRAWAL FROM SCHOOL

Your financial aid may be affected if you withdraw from the University. According to the Federal Return of Title IV refund policy, your refund, if any, will be based on the last day of attendance. Refunded amounts will typically be credited in the following order: unsubsidized Federal Stafford Loan, subsidized Federal Stafford Loan, Federal Perkins Loan. Any remaining credit balance will be refunded to the student upon written request.

HOUSING

Columbia University offers several housing options for full-time graduate students enrolled in the Graduate School of Architecture, Planning and Preservation. The descriptions of accommodations and rates below are in effect for the 2013-2014 academic year. Students can expect a rate increase for subsequent academic years.

UNIVERSITY APARTMENT HOUSING

Columbia University Apartment Housing is available to all GSAPP degree candidates, but it is limited and not guaranteed. University Apartment Housing (UAH) provides eligible full-time degree candidates with subsidized housing near the University. Students must maintain full-time status to remain in housing. The UAH inventory consists of apartment shares and dormitory-style rooms. There are also a limited number of studio/efficiency, one bedroom, and two bedroom units for which priority is given to couples and families. Most student housing is located within walking distance of the University campus in the Morningside Heights neighborhood. Students are also housed in Manhattan Valley, just south of Morningside Heights, and in Washington Heights, just north of Morningside Heights. Additionally, students are housed in Riverdale, Bronx, in a new facility known as The Arbor. Rents are based on the size of the apartment/room and what amenities, furnishing, and/or utilities, if any, are provided.

Students are billed either monthly or by term, depending on the building assigned. All leases/contracts terminate on May 31 to coincide with the close of the academic year. Continuing full-time students are offered renewals beginning June 1 through the next academic year. Upon completion of the degree requirements, students must vacate their UAH accommodation.

Columbia Security operates car and foot patrols within the entire UAH area, and a shuttle bus provides transportation to and from campus and other UAH properties during evening hours. Weekday shuttle service to and from The Arbor is provided.

For further information, visit the UAH website at <<http://facilities.columbia.edu/housing/home>>.

HOUSING LOTTERY

The GSAPP receives housing allocations directly from UAH in early April. Our policy is to conduct a lottery in order to fairly distribute allocations among new degree candidates, regardless of their housing preferences. Priority is given to domestic and international students traveling long distances. Continuing students who wish to apply for UAH accommodations are automatically placed on the WAITLIST. The first-round of the housing lottery takes place shortly after the April 15th enrollment deadline, in order to ensure that all enrolled students may have the opportunity to make an informed

decision about their graduate education. Students are notified via email by the GSAPP when the results of the housing lottery become available. Results can also be viewed online via the UAH Housing Portal website. Housing applicants with an APPROVED status receive an allocation from UAH; applicants whose status remains unchanged are placed on the WAITLIST. If the GSAPP receives additional allocations, additional rounds of the lottery are conducted in the same manner.

OFF CAMPUS

Columbia's Off-Campus Housing Assistance (OCHA) office assists Columbia students and affiliates in their search for rental housing in the metropolitan area. OCHA manages a database known as the Housing Registry, which includes available rooms and apartments in non-Columbia-owned buildings and sublets of units in Columbia-managed housing. Prospective roommates can also post and search profiles on this site. In addition, OCHA offers housing search counseling and is supported in these efforts by their cooperative relationships with two New York City real estate/relocation agencies. The services of OCHA are for students and affiliates of the University only. OCHA's services are free of charge. OCHA does not operate as a real estate or rental agency; however, some of its listers may charge a fee. The service does not screen owners, tenants or roommates, and apartments are not inspected or approved by Columbia or the employees of OCHA. Listing of accommodations does not constitute a recommendation of such facilities, nor is the accuracy of the description verified by OCHA. For further information, visit the OCHA website at <<http://facilities.columbia.edu/housing/intro-ocha-3>>.

International House, a privately owned student residence and program center near campus, has accommodations for about seven hundred graduate students, both foreign and domestic. A cafeteria, recreational facilities, and varied cultural and professional programs are available to members. International House also has resident scholarships. One hundred spaces at International House are reserved for Columbia students and are contracted through University Apartment Housing (UAH).

To be eligible for admission to International House, a student must be a graduate student, at least twenty-one years old, and registered for at least 12 points. Interested students may apply through UAH and/or directly to International House, 500 Riverside Drive, New York, NY 10027; telephone (212) 316-8436; website <<http://www.ihouse-nyc.org/>>. Filing an application with both International House and UAH affords the maximum opportunity.

The GSAPP Admissions and Student Affairs Office communicate other housing opportunities to incoming students as they become available and to continuing students upon request. Students should also note that postings regarding available apartments and apartment shares can be found online, on bulletin boards around campus and in the surrounding neighborhood. Naturally, these postings are not related to, or inspected by the University, but they can provide an extra source of possible accommodations for students seeking off-campus housing.

INSURANCE AND HEALTH SERVICES

HEALTH SERVICES AT COLUMBIA (HSC) on the Morningside campus provides integrated, accessible services and programs that support the well-being of the campus community, and the personal and academic development of students. They are comprised of more than one hundred individuals: medical providers, dietitians, disability specialists, health educators, therapists, psychiatrists, peer counselors, student personnel, support staff, and administrative professionals. All programs and services provided by HSC adhere to strict standards of confidentiality in compliance with state and federal laws. HSC is made up of the following departments:

Alice! Health Promotion Program seeks to make the campus healthier by connecting students with information and resources, cultivating healthy attitudes and behaviors, and fostering a culture that values and supports a healthy community. Alice! coordinates Stressbusters, the 100 m.i.l.e. Club, and the Go Ask Alice! Internet Q&A service. Alice! is in suite 108A on the main floor of Wien Hall (212-854-5453).

Counseling and Psychological Services (CPS) supports the psychological and emotional well-being of the campus community by providing individual counseling for students, couples counseling for students and their partners, student life support groups, and medication consultations. Emergency consultations are available to the entire university community. CPS is on the eighth floor of Lerner Hall (212-854-2878).

Office of Disability Services (ODS) facilitates equal access for students with disabilities by coordinating reasonable accommodations and support services. Reasonable accommodations are adjustments to policy, practice, and programs that "level the playing field" for students with disabilities and provide equal access to Columbia's programs and activities. Examples include the administration of exams, services such as note-taking, sign language interpreters, assistive technology, and coordination of accessible housing needs. Accommodation plans and services are custom designed to match the disability-related needs of each student and are determined according to documented needs and the student's program requirements. Registration includes submission of both the Application for Accommodations and Services and disability documentation. The application form and documentation guidelines are available online and at the ODS office. Students are encouraged to register within the first two weeks of the semester to ensure that reasonable accommodations can be made. Please note that students are not eligible to receive reasonable accommodations until the registration process is complete. ODS is in Alfred Lerner Hall, 7th Floor (212-854-2388).

Primary Care Medical Services (PCMS) provides comprehensive medical care for routine, urgent, and chronic needs of students, as well as well-woman services, GLBTQ health care, and immunizations. Also part of PCMS are the multidisciplinary Eating Disorders Team, Travel Medicine Program, CU Emergency Medical Services (CAVA), and the Gay

Health Advocacy Project (GHAP). PCMS is on the third and fourth floors of John Jay Hall (General Info: 212-854-2284).

Sexual Violence Prevention and Response Program (SVPRP) educates students and administrators about consent and coercion, and promotes community standards for a respectful and safe campus. Through its programs and services, SVPRP fosters individual and collective action to end sexual and relationship violence.

The Rape Crisis/Anti-Violence Support Center provides peer counseling, advocacy, and education to survivors and co-survivors of sexual assault, relationship violence, childhood sexual abuse, and other forms of violence. The Men's Peer Education Program provides educational events, prevention strategies, and leadership training programs to engage men to end sexual and relationship violence. For information on how to report sexual misconduct, or for the University's policy on sexual misconduct, please contact Alfred Lerner Hall Room 301, 3rd Floor, 212-854-3500.

Contact information:

<http://www.health.columbia.edu>

On-campus Emergency Resources:

CU Emergency Medical Services 212-854-5555

Urgent after-hours medical and mental health matters 212-854-9797

General Information 212-854-2284

Rape Crisis/Anti-Violence Support Center 212 854-HELP

Public Safety, Security x99 (On Campus), 212-854-5555 (Off Campus)

Off-campus Emergency Resources: St. Luke's-Roosevelt Emergency Room 212-523-3335

St. Luke's-Roosevelt Psychiatric Emergency 212-523-3347

Dial 911 for an emergency

IMMUNIZATION REQUIREMENTS

MENINGOCOCCAL MENINGITIS DECISION

New York State public health law requires that students receive information from their institutions about meningococcal meningitis and the vaccine that protects against most strains of the disease that can occur on university campuses. Columbia students must make an informed decision about being vaccinated and certify their decision online. Full instructions are given online, and the process takes two to three minutes to complete. Students must formally indicate their decision about being vaccinated before they will be permitted to register for classes. Certify your meningitis decision online before

registration begins.

MEASLES, MUMPS, AND RUBELLA (MMR)

New York State public health law requires that students taking 6 or more points provide documentation of immunity to measles, mumps, and rubella (MMR) before their first term of study. There are several ways to document immunity. In all cases, the Columbia University MMR form must be completed and submitted to 108 Wein Hall no later than the specified deadline. Please note: the MMR form requires a physician's signature.

The blood test or MMR immunizations can be obtained at Primary Care Medical Services. If you have any questions about these requirements, please e-mail us at hs-enrollment@columbia.edu or visit www.health.columbia.edu.

GENERAL REGISTRATION PROCEDURES

The registration procedure for all students is as follows (see Academic Calendar for dates):

All GSAPP degree candidates must be enrolled as full-time students (minimum of 12 pts) for the duration of their program. Students may register either by the Web via SSOL (<https://ssol.columbia.edu/>) appointment times.

Full instructions may be found on the GSAPP website and in the Fall 2014 registration guide.

AUDITING COURSES

In no case will an audited course appear on the student's record, nor is it possible to turn an audited course into a credit course by paying the fee after the fact. Courses previously taken for credit may not be audited.

CHANGES IN PROGRAMS OF STUDY

Students who wish to drop courses or to make other changes in their programs of study must obtain approval from the Student Affairs Office on a special form. The deadline for making program changes in each term is shown in the Academic Calendar. In no case is permission to add courses granted after the last day of the change-of-program period in each term. Failure to attend classes or unofficial notification to the instructor does not constitute dropping a course and results in a failing grade in the course.

Tuition for courses dropped below 12 points during the change-of-program period is refunded in full. For courses dropped after the last day for change of program, no adjustment is made.

COURSES OF INSTRUCTION

The University reserves the right to withdraw or modify the courses of instruction or to change the instructors at any time.

It is not recommended that students drop or change required courses without official approval from their advisors.

COURSE EVALUATIONS

Students will be asked to fill out course evaluations for all courses. Evaluation forms are available online through New Courseworks. Evaluations are due before grades are submitted. Faculty will gain access to their evaluations after they have submitted their grades for the course.

GRADES

All students registered in the Graduate School of Architecture, Planning, and Preservation are graded as described below:

HP (high pass) = a superior level of work.

P (pass) = an acceptable level of work.

LP (low pass) = work that meets minimal standards.

F (fail) = work that is unsatisfactory.

The mark of INC (Incomplete) is not used except in the case described below: at the request of a student who has satisfactorily met all the requirements for a course except for the completion of certain assigned papers, graphic presentations, or reports that the student had to postpone because of proven illness.

Authorized Incompletes must be changed to a final grade by the first day of registration for the spring term in the case of all fall papers and projects, and by June 10 for all spring work. Any INC that has not been removed by the instructor by the relevant deadline will automatically turn into the grade of F. This grade cannot be changed to Pass; if the course is a required course, it will have to be repeated.

The mark of CP (credit pending): given only in graduate research courses in which student research projects regularly extend beyond the end of the term. Upon completion, a final qualitative grade is assigned and credit allowed. The mark of CP implies satisfactory progress.

The mark of UW (unofficial withdrawal): assigned to students who miss more than three required classes or whose names appear on the grade sheet but who have discontinued attendance.

GRADE APPEALS AND GRADE CHANGES

The awarding of grades and all other academic evaluations rests entirely with the faculty. If students have a concern relating to a particular grade or other assessment of their academic work, the student first should speak with the instructor of the class to understand how the grade or other evaluation was derived and to address the student's specific concern. If the students do not feel comfortable speaking with the class instructor about the matter, they should then bring the issue to the attention of their program director.

If the students are unable thus to resolve the matter to their satisfaction and believe that a procedural issue is involved, they should bring the matter to the attention of the Assistant Dean of students. The Assistant Dean of students will work with the student and the faculty to determine whether there has been a procedural breach and if so, take immediate steps to remedy the matter. If the Assistant Dean, together with appropriate faculty other than the instructor, decides that there is no need for further action, the

student will be informed and the decision will be final. After grades are posted, students may not submit additional work in order to elevate a grade.

ACADEMIC STANDING

Students receiving a grade of F in any design course, or more than one F in non-design courses, will be asked to withdraw. Although consideration is given to particular cases where a student's work has suffered because of illness, the student may be required to take additional work to demonstrate that he or she has overcome the problems that have resulted in a poor record. A student with more than two non-passing grades is not considered to be in good academic standing. A limit is placed on the number of Low Pass (LP) grades permitted for credit toward a student's degree.

For Master of Architecture: No more than two LPs are permitted in any of the following categories: Design sequence, History/Theory sequence, Building Technologies sequence. A third LP in any of the above categories will not carry credit toward the degree.

For the M.S. in Advanced Architectural Design and the M.S. in Architecture and Urban Design: No more than two LPs are permitted in the Design sequence and no more than three LPs in the entire program.

For the M.S. in Historic Preservation and the M.S. in Urban Planning Programs: No more than four LPs are permitted in the entire program.

For the M.S. in Real Estate Development Program: No more than three LPs are permitted in the program.

PLAGIARISM AND ACKNOWLEDGMENT OF SOURCES

Students will be asked to do a great deal of written work while at Columbia: term papers and analytic essays of different lengths. These papers play a major role in course performance.

There have been some instances in which students attempt to submit the work of other people as their own. Because intellectual integrity is the hallmark of educational institutions, academic dishonesty is one of the most serious offenses that a student can commit at Columbia GSAPP. A failing grade in the course is a minimal penalty.

In making clear Columbia's policy on plagiarism, it is not feasible to include here all the various forms—they are innumerable—that plagiarism might take. It is useful, however, to list several varieties in order to dispel confusion about actions that the School will not accept:

1. Submitting essays, or portions of essays, written by other people as one's own;
2. Failing to acknowledge, through footnotes and bibliographic entries, the source of ideas essentially not one's

3. Failing to indicate paraphrases or ideas or verbatim expressions not one's own through proper use of quotations and footnotes;
4. Collaborating on an assignment or examination without specific permission from the faculty member to do so.

If questions arise concerning proper use of quotations, footnotes, or bibliographies, the student should contact the instructor. In addition, students may not submit an essay written for one course to a second course without having received prior permission from both instructors. Seeking informed advice from a faculty member is the best way to avoid confusion about matters that can be complicated.

LEAVE OF ABSENCE

A leave of absence may be granted upon the student's written request after satisfactory completion of one year in the Graduate School of Architecture, Planning, and Preservation. Written requests must be made by December 15 for leaves beginning in January and by August 1 for leaves beginning in September. A leave of absence assures readmission to the School provided the student complies with the terms of the leave. Leaves of absence are granted only to students in good academic standing or as required by studio faculty in the M.Arch. Program and are considered only after the student has completed two semesters in the program.

Readmission after an authorized leave of absence requires notification (by letter) to the Office of Admissions by July 1 for the fall term and by November 15 for the spring term. Failure to give written notice on or before these dates will result in forfeiture of a place in the studio sequence; other classes may still be taken.

READMISSION AFTER AN UNAUTHORIZED ABSENCE

Students who absent themselves without obtaining a leave of absence must apply for readmission to the School. This formal application must be made to the Office of Admissions by the specified deadlines for admission. Readmission is not guaranteed. Students may be required to fulfill the new degree requirements, if they are different from the ones of the student's first admission.

LEAVE FOR MILITARY DUTY

Any student who is a member of the National Guard or other reserve component of the armed forces of the United States or of a state organized militia and is called or ordered to active duty will be granted a military leave of absence for the period of active duty and for one year thereafter. Upon return from military leave of absence, the student will be restored to the educational status attained prior to being called or ordered to such duty without loss of academic credits earned, scholarships or grants awarded, or tuition or other fees paid prior to the commencement of active duty. The University will credit any tuition or fees paid for the period of the military leave of absence to the next enrollment

period or will refund the tuition and fees paid to the student, at the student's option. Students in need of a military leave of absence should contact the Dean of Students for their school.

APPLICATION OR RENEWAL OF APPLICATION FOR A DEGREE

Degrees are conferred three times a year-in October, February, and May. A candidate for any Columbia degree (except the doctoral degree) must file an application with the Registrar's Office in accordance with the dates shown in the Academic Calendar. Applications received after the filing period will automatically be applied to the next conferral date. If the student fails to earn the degree by the conferral date for which he or she has made application, the student must renew the application in order to graduate.

DIPLOMAS

There is no charge for the preparation and conferral of an original diploma. If your diploma is lost or damaged, there will be a charge of \$100 for a replacement diploma. Note that replacement diplomas carry the signatures of current University officials. Information about and the application for replacement diplomas may be found on the Registrar's Web site at www.columbia.edu/cu/registrar/docs/forms/app-for-rep-diploma.html.

NAME CHANGES

Students may change their name of record only while currently enrolled in the University. There is no charge for this service, but students must submit a name change affidavit to the Office of the Registrar. When you graduate or cease to enroll in the University, your name of record is considered final and may not be changed unless you enroll again at the University.

TRANSCRIPTS AND CERTIFICATIONS

In order to release a transcript, a student must provide written consent. You may obtain an official transcript of your academic record at Columbia University by writing to: Student Service Center, Columbia University, 205 Kent Hall, Mail Code 9202, 1140 Amsterdam Avenue, New York, NY 10027, Attention: Transcripts.

Please include the following information with your request: current and former names; personal identification number (PID) if known; schools attended and dates of attendance; degrees awarded and dates awarded; number of transcripts desired and complete address for each; your current address and telephone number; and your signature authorizing the release of your transcript. You may also order transcripts in person at 205 Kent Hall on the Morningside campus (9 a.m.-5 p.m., Monday-Friday).

Currently enrolled students may order transcripts for themselves and for colleges and

universities via the Student Services page on the World Wide Web at <https://ssol.columbia.edu/>. There is no charge for issuing transcripts; however, all students pay a one-time transcript fee of \$95 upon their first registration at the University. The normal processing time for transcripts is two to three business days. If you mail in your request for a transcript, you should allow several additional days for delivery to and from the University.

Currently enrolled students may order certifications of their enrollment and degrees in person or on the Student Services page on the Web as described above. Certifications are provided while you wait if you come to 205 Kent to request them. There is no charge for certifications.

The Registrar's Office no longer handles requests by noncurrent students, alumni, or third parties. Requests should be made either by calling the National Student Clearinghouse: 703-742-4200; by e-mailing: degreeverify@studentclearinghouse.org; or by mail: National Student Clearinghouse, 13454 Sunrise Valley Drive, Suite 300, Herndon, VA 20171.

SEMINAR REGISTRATION PROCEDURE

Courses noted as being seminars are subject to limitations on enrollment (generally between twelve and twenty students), and students are required to follow the procedure outlined below in order to apply for admission:

1. For those seminars that are overenrolled, students will be asked to submit to the professor a short curriculum vitae and a one-page description giving the reasons for their interest in the course, etc. These submissions should be turned in to the Architecture Office, 404 Avery.

STUDIO PROCEDURES

M.Arch. Studio Critic Selection Procedure (Lottery)

The students will select their studio critics in a lottery organized and run by the student representatives on the Program Council, following presentations made by the representative faculty members as to the nature of the projects to be given within each studio, together with the teaching intention, etc. Students will be asked to select their first, second, third, fourth, etc., choices, and places will be assigned according to random selection, assigning students to the highest possible choices on their list. Reciprocal selection by critic may also be organized, if academic priorities and/or student/faculty's interests require it.

This does not apply to Architecture A4001-Core studio, I (fall term): students in this studio will receive their faculty assignments on the first day of studio.

Studio Design Review

The studios are graded in the same manner as nonstudio courses on the University transcript: HP (High Pass), P (Pass), LP (Low Pass), INC (Incomplete), or F (Fail). Further evaluation is an integral part of the architecture program. If a student is deemed in danger of failing in a studio term, he or she will be notified by their critic as early in the term as possible and no later than four weeks before the end of the term. Such notification will be done either by a letter from the critic or verbally in a meeting with the critic to be followed by a memo noting that such a conversation has taken place.

Under no circumstances will students be exempt from presenting their design work in the final review of a project, nor can they be kept from presenting by their critic. After this review, students will be told whether their work is judged passing, incomplete, or failing.

Only in exceptional circumstances will the grade of Incomplete be given (see Grades). Those students whose work is judged incomplete must satisfactorily complete the work required as stipulated by the studio critic. In some cases, a year off from school may be required before enrollment in the subsequent studio is permitted. A student may receive a failing grade in studio at the end of the term without having been notified earlier (this would occur, for example, if a student fails to satisfy presentation requirements for the last project of a term).

After the final review of each design problem, the studio critic will inform the student verbally if he or she has not finished the work satisfactorily. Works deemed insufficient and those selected for the Archives may be retained by the critic for further evaluation by a faculty committee. The studio critic will also complete a written evaluation for each student in his or her section. A copy of these forms as well as the above-mentioned letters are kept in the student's records in the Admissions Office and are available to each student.

Studio Evaluation Procedure

M.Arch Program Advising and Comprehensive Review Schedule					
When		Participants		Format	Requirements
1st Year	January	Individual	w/ Dean of Admissions + Faculty	Curriculum Advising	NA
	April	Group	w/ M.Arch II + III students	Portfolio Workshop Student to Student Advising	NA
2nd Year	December	Group	w/ Studio Faculty	Core Studio Discussion	NA
	April	Individual	w/ Studio Faculty	Comprehensive Studio Review	Portfolio Required
3rd Year	September	Individual	w/ Dean of Admissions + Faculty	Transcript Review	Transcript Supplied by Admissions Office
	April	Individual Submission	Faculty	Portfolio Review	Portfolio Required

M.Arch Comprehensive Review/ Advising Schedule 1st Year

January 2014 - Individual Curriculum Advising w/ Dean of Admissions

Following the completion of Core Studio I, all students are required to schedule curriculum advising with the Dean of Admissions to coordinate their academic schedule for the three year M. Arch Program. Students who require more focused studio/ history theory or building technology advising will be directed to the appropriate faculty member.

January 2014 – Portfolio Workshop, Student to Student Advising

Following the completion of Core Studio II, a portfolio Workshop will be held and students will be informed of the requirements for Comprehensive Review and Final Portfolio Submission, as well as have the ability to view and discuss Portfolios, Comprehensive reviews, and Curriculum Requirements with M. Arch students more senior in the program.

2nd Year

December 2013 – Core Studio Group Advising/Discussion

Following the completion of the Core III Studio Final Reviews, the faculty will hold an informal discussion with the second year students reflecting on what the students have studied in the Core and what is expected in the Advanced Studios.

April 2014 – Individual Comprehensive Studio Review with Faculty Committee

Following the completion of second year, students will be expected to produce a complete portfolio of Studio work, and meet with an assigned group of faculty members for a Comprehensive Review of their progress in Core and Advanced IV. At the Comprehensive Studio Review faculty will have an evaluation form /checklist, to ensure the faculty and student have a broad structure around which they thoroughly and consistently discuss the work. This discussion will attempt to convey briefly to each student the general feeling of the faculty about his or her design work and suggestions may be made on how to prepare for the following design studio. In those cases where the student is deemed to be having difficulty with the work, the review committee may recommend and/ or require 1. Additional design work before the student proceeds to the next term. 2. A failing grade be given for the studio, even if no warning letter was sent.

3rd Year

September 2013 – Individual Transcript Review w/ Dean of Admissions + Faculty Advisors

Prior to the end of add/drop for the fall semester, each student should meet with the Dean of Admissions for a pre-graduation transcript review to ensure that all students are prepared to fulfill all graduation requirements. Students who require more focused studio/ history theory or building technology advising will be directed to the appropriate faculty member. April/May 2010–Final Portfolio Submission to Faculty Committee

At the completion of the MArch studio sequence, and prior to graduation, students are required to submit a portfolio of representative work from each semester and a final overview of their studies at the GSAPP.

INDEPENDENT RESEARCH OPTION

Students entering fifth-term architecture programs who are interested in pursuing an Independent Design Option may submit proposals to the thesis committee or the director of the advanced studios. This proposal should at a minimum comprise two typed pages and should be broken down into the following sections:

1. An identification of the problem and/or study area specifying the type, the area of study, or the state of the art;
2. A conceptual critique of this material formulating the nature of the problem or brief and the envisaged scope of the work to be performed;
3. A short bibliography, annotated where necessary.

The proposal must identify a critical problem in the current practice of architecture that is capable of precise research and development and of being brought to a specific resolution in terms of a hypothetical building project. Although the research and design stages are seen as being relatively independent in terms of procedure, the student must give indications as to how the research program may affect the built outcome.

If approved, the Independent Design Option may be developed first as independent research for credit (3 pts) in consultation with a faculty member who will serve as research tutor and a member of the advanced studios faculty who will be teaching in the spring term. This research is to be carried out while still fulfilling the standard studio requirements of the fifth term.

The design aspect of the Independent Design Option is to serve as the studio subject matter for the student who will develop the design under the supervision of the same member of the advanced studio faculty in the spring term.

OFFICIAL REGULATIONS

RESERVATION OF UNIVERSITY RIGHTS

This bulletin is intended for the guidance of persons applying for or considering application for admission to Columbia University and for the guidance of Columbia students and faculty. The bulletin sets forth in general the manner in which the University intends to proceed with respect to the matters set forth herein, but the University reserves the right to depart without notice from the terms of this bulletin. The bulletin is not intended to be and should not be regarded as a contract between the University and any student or other person.

UNIVERSITY REGULATIONS

According to University regulations, each person whose registration has been completed will be considered a student of the University during the term for which he or she is registered unless the student's connection with the University is officially severed by withdrawal or otherwise. No student registered in any school or college of the University shall at the same time be registered in any other school or college, either of Columbia University or of any other institution, without the specific authorization of the dean or director of the school or college of the University in which he or she is first registered.

The privileges of the University are not available to any student until he or she has completed registration. A student who is not officially registered for a University course may not attend the course. No student may register after the stated period unless he or she obtains the written consent of the appropriate dean or director.

The University reserves the right to withhold the privilege of registration or any other University privilege from any person with an unpaid debt to the University.

ATTENDANCE

Students are held accountable for absences incurred owing to late enrollment.

RELIGIOUS HOLIDAYS

It is the policy of the University to respect its members' religious beliefs. In compliance with New York State law, each student who is absent from school because of his or her religious beliefs will be given an equivalent opportunity to register for classes or make up any examination, study, or work requirements that he or she may have missed because of such absence on any particular day or days. No student will be penalized for absence due to religious beliefs, and alternative means will be sought for satisfying the academic requirements involved.

Officers of administration and of instruction responsible for scheduling of academic activities or essential services are expected to avoid conflict with religious holidays as much as possible. If a suitable arrangement cannot be worked out between the student and the instructor involved, they should consult the appropriate dean or director. If an additional appeal is needed, it may be taken to the Provost.* Since policies and procedures are subject to change, please check the Web site for FACETS, the University student handbook (<http://www.columbia.edu/cu/facets/>), for the most current information.

DISABILITY ACCOMMODATION

Students seeking an accommodation for a disability should contact the Office of Disability Services at 212-854-2388. Information on the services provided by the Office may be found online at <http://www.health.columbia.edu/docs/services/ods/index.html>.

ACADEMIC DISCIPLINE

The continuance of each student upon the rolls of the University, the receipt of academic credits, graduation, and the conferring of any degree or the granting of any certificate are strictly subject to the disciplinary powers of the University.

RULES OF UNIVERSITY CONDUCT

The Rules of University Conduct (Chapter XLIV of the Statutes of the University) provide special disciplinary rules applicable to demonstrations, rallies, picketing, and the circulation of petitions. These rules are designed to protect the rights of free expression through peaceful demonstration while at the same time ensuring the proper functioning of the University and the protection of the rights of those who may be affected by such demonstrations.

The Rules of University Conduct are University-wide and supersede all other rules of any school or division. Minor violations of the Rules of Conduct are referred to the normal disciplinary procedures of each school or division ("Dean's Discipline"). A student who is charged with a serious violation of the Rules has the option of choosing Dean's Discipline or a more formal hearing procedure provided in the Rules.

All University faculty, students, and staff are responsible for compliance with the Rules of University Conduct. Copies of the full text are available in FACETS, the University student handbook (<http://www.columbia.edu/cu/facets/>), and at the Office of the University Senate, 406 Low Memorial Library.

EQUAL EDUCATIONAL OPPORTUNITY AND STUDENT NONDISCRIMINATION POLICIES

Columbia University is committed to providing a learning environment free from unlawful discrimination and harassment, and to fostering a nurturing and vibrant community founded upon the fundamental dignity and worth of all of its members. Consistent with

this commitment and with applicable laws, it is the policy of the University not to tolerate unlawful discrimination or harassment in any form and to provide students who feel that they are victims of discrimination or harassment with mechanisms for seeking redress. Columbia University does not discriminate against any person in the administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other University-administered programs or permit the harassment of any student or applicant on the basis of race, color, sex, gender (including gender identity and expression), pregnancy, religion, creed, marital status, partnership status, age, sexual orientation, national origin, disability, military status, or any other legally protected status. Nothing in this policy shall abridge academic freedom or the University's educational mission. Prohibitions against discrimination and harassment do not extend to statements or written materials that are germane to classroom subject matter. All members of the University community are expected to adhere to the applicable policies and to cooperate with the procedures for responding to complaints of discrimination and harassment. All are encouraged to report any conduct believed to be in violation of these policies. All students and applicants for admission are protected from coercion, intimidation, interference, or retaliation for filing a complaint or assisting in an investigation under any of the applicable policies and laws. Subjecting another to retaliatory, intimidating, or coercive conduct for filing a complaint or participating in an investigation is prohibited and may be addressed as a separate violation.

DEFINITIONS

For purposes of these policies and procedures, discrimination, discriminatory harassment, and sexual harassment are defined as follows:

Discrimination

Discrimination is defined as:

- + treating members of a protected class less favorably because of their membership in that class; or
- + having a policy or practice that has a disproportionately adverse impact on protected class members.

Discriminatory Harassment

Discriminatory harassment is defined as substantially interfering with an individual's educational experience by subjecting him or her to severe or threatening conduct or to repeated humiliating or abusive conduct, based on his or her membership in a protected class. This includes sexual harassment, which is described below in further detail. Sexual Harassment Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- + submission to such conduct is made either explicitly or implicitly a term or condition of an individual's education; or
- + submission to or rejection of such conduct by an individual is used as the basis for academic decisions affecting that individual; or
- + such conduct has the purpose or effect of unreasonably interfering with an individual's academic performance or creating an intimidating, hostile, demeaning, or offensive academic or living environment.

Consensual, romantic relationships between faculty and other employees and students are generally not considered sexual harassment and are not prohibited by University policy. Individuals should be aware, however, that these relationships are susceptible to being characterized as nonconsensual, and even coercive, if there is an inherent power differential between the parties, and can lead to complaints of sexual harassment. For further information, students and employees should consult the Romantic Relationship Advisory Statement, which is printed here and is available online at <http://www.columbia.edu/cu/vpaa/eoaa/docs/romance.html>.

STUDENT PROCEDURES ON DISCRIMINATION AND HARASSMENT

The University offers a number of options for those seeking the assistance or intervention of offices and individuals authorized to respond to complaints of discrimination, discriminatory harassment, or sexual harassment. Any person who believes that he or she has been the subject of discrimination or harassment may choose initially to deal with the alleged offender directly through a face-to-face discussion, a personal telephone conversation, e-mail correspondence, or letters. In some cases, this approach may effectively resolve the situation; in those cases where it fails or falls short, the individual may pursue the other options provided. Students with questions as to the appropriate procedure in a particular situation should contact the Dean of Students for their school.

CONFIDENTIAL GUIDANCE AND ASSISTANCE

The University has crafted a "safe haven" for those individuals who want to approach a knowledgeable person for confidential conversations. Individuals who wish to take advantage of this option may contact either the University Ombuds Officer or a member of the University Panel on Discrimination and Sexual Harassment. These officers are not authorized to conduct formal investigations.

UNIVERSITY OMBUDS OFFICE

The Ombuds Office is an informal, safe, and confidential place to voice concerns. The Ombuds Officer will listen, offer information about Columbia University policies and resources, and help visitors evaluate a range of options for resolving a problem. The

visitor selects the course of action, if any. The Ombuds Officer may, with permission, participate in informal conflict resolution and may mediate if all parties agree. The Ombuds Office provides information about formal grievance procedures in other offices and is a resource for any kind of issue, including concerns that fall outside the scope of formal complaint channels. In some situations, the Ombuds Officer may help find ways to convey information while maintaining the anonymity of the source. Discussions with the Ombuds Officer are off-the record and do not constitute notice to the University.

For further information, contact Ombuds Officer Marsha Wagner or Associate Ombuds Officer Bathabile Mthombeni-Njenga at 660 Schermerhorn Extension; telephone: 212-854-1234; fax: 212-854-6046; e-mail:ombuds@columbia.edu. Further information is also available on the Ombuds Office Web site (<http://www.columbia.edu/cu/ombuds>) and in FACETS, the University student handbook (<http://www.columbia.edu/cu/facets/>). On Wednesdays an Ombuds Officer is at Columbia University Medical Center, 101 Bard Hall, 50 Haven Avenue; telephone: 212-304-7026.

UNIVERSITY PANEL ON DISCRIMINATION AND SEXUAL HARASSMENT

The University Panel on Discrimination and Sexual Harassment is composed of trained, experienced, and accessible members of the Columbia community. Members of the Panel provide an informal, impartial, nonadversarial setting in which problems can be addressed through confidential counseling or mediation. Any student may approach any Panelist to discuss his or her concerns and seek advice. The Panelist may also meet with persons other than the student to ascertain facts relevant to appropriate resolution of the complaint or to seek an informal resolution to situations in which there are allegations of discrimination, discriminatory harassment, or sexual harassment. Discussions with Panelists are confidential and do not constitute notice to the University. A list of the current Panelists may be found online at <http://www.columbia.edu/cu/vpaa/eoaa/docs/shpanel.html>.

MEDIATION

Students may choose to resolve their complaints through mediation by the Office of Equal Opportunity and Affirmative Action, the University Ombuds Office, or the Mediation Clinic at Columbia Law School. Mediation is an informal, voluntary, and confidential process where parties can participate in a search for a fair and workable solution. Guidelines for mediation by the EOAA Office or the Mediation Clinic may be found online at <http://www.columbia.edu/cu/vpaa/eoaa/docs/mediation.pdf>.

FORMAL COMPLAINT PROCEDURES AGAINST ANOTHER STUDENT

DEAN'S DISCIPLINE

Student complaints of discrimination or harassment against another student should be filed with the Dean of the school in which the accused student is enrolled. Complaints against students are investigated under the appropriate Dean's Discipline procedure of the accused student's school, with the exception noted below. Students found to have engaged in discrimination or harassment will be subject to discipline up to and including expulsion.

DISCIPLINARY PROCEDURES FOR SEXUAL ASSAULT

Complaints involving nonconsensual physical contact of a sexual nature by a student against a student must be filed under Dean's Discipline or the Disciplinary Procedures for Sexual Assault. A copy of the Disciplinary Procedures for Sexual Assault may be obtained from the Program Coordinator of the Disciplinary Procedures for Sexual Assault, 701A Alfred Lerner Hall, or online at <http://www.columbia.edu/cu/sexualmisconduct/html>.

PROCEDURE FOR COMPLAINT AGAINST A STUDENT ORGANIZATION

Students who wish to file a complaint of discrimination or harassment against a student organization should do so in consultation with the Dean of their own school; the Dean will identify the appropriate procedure and channels, and assist the student in pursuing the complaint.

PROCEDURE FOR COMPLAINT AGAINST AN EMPLOYEE

OFFICE OF EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION

Student complaints of discrimination, discriminatory harassment, or sexual harassment against a member of the University's staff or faculty should be filed with the Office of Equal Opportunity and Affirmative Action. Complaints filed with the EOAA office are governed by the Equal Employment Opportunity and Nondiscrimination Policies and Procedures on Discrimination, Discriminatory Harassment, and Sexual Harassment, which are available online at <http://www.columbia.edu/cu/vpaa/eoaa/docs/nondispol.html>. The Office of Equal Opportunity and Affirmative Action is located at 103 Low Memorial Library and can be reached by telephone at 212-854-5511.

GRIEVANCE PROCEDURES

Students should consult their school's policy for the appropriate procedure to complain about a faculty member's conduct in an instructional setting. School policies may be

found on the Provost's Web page at <http://www.columbia.edu/cu/provost/docs/policies.html>.

INDEPENDENT INVESTIGATION

The University, at the discretion of the General Counsel, may conduct an investigation independent of or in addition to the procedures provided herein at any time. The investigation may involve complaints or allegations concerning discrimination, discriminatory harassment, or sexual harassment against the University or any of its employees or students.

SEXUAL ASSAULT POLICY

On February 25, 2000, the University Senate adopted a Sexual Misconduct Policy and Disciplinary Procedure that can be used as an alternative to Dean's Discipline. Renamed the Sexual Assault Policy, it applies to all students in all schools of the University. The Disciplinary Procedure for Sexual Assault applies to all students, with the exception of those enrolled in the Law School, but including the students of Teachers College and Barnard College. The policy prohibits sexual assault by any student and provides for comprehensive education of students, faculty, and administrators about the issue of sexual assault.

Copies of the policy and procedure are available from the Administrative Program Coordinator of the Disciplinary Procedure for Sexual Assault, 701 Lerner, Mail Code 2617, 2920 Broadway, New York, NY 10027; telephone: 212-854-1717; fax: 212-854-2728; <http://www.columbia.edu/cu/sexualmisconduct/>. The policy and procedure can also be found in the Office of the Dean of Students of every school and in FACETS, the University student handbook (<http://www.columbia.edu/cu/facets/>).

COLUMBIA UNIVERSITY POLICY STATEMENT AGAINST SEXUAL ASSAULT

Columbia University, Barnard College, and Teachers College do not tolerate sexual assault of any degree or kind. The University community is committed to fostering a healthy and safe environment in which every member of the community can realize her or his fullest potential.

The University defines sexual assault as nonconsensual, intentional physical contact of a sexual nature, such as unwelcome physical contact with a person's genitals, buttocks, or breasts. Sexual assault occurs when the act is committed either by (1) physical force, violence, threat, or intimidation; (2) ignoring the objections of another person; (3) causing another's intoxication or impairment through the use of alcohol or other drugs; or (4) taking advantage of another person's incapacitation, state of intimidation, helplessness, or other inability to consent.

Sexual assault is a serious problem on college campuses throughout the country. To

counteract this problem, the University provides educational and prevention programs, resources for individuals dealing with sexual assault, and accessible methods of complaint resolution.

The University encourages students who believe they have been subjected to nonconsensual physical contact of a sexual nature to report these incidents, whether or not they choose to file an official complaint. Reporting enables the University to protect the complainant and the larger community by taking appropriate actions.

In recognition of the sensitive nature of sexual assault cases, and the difficulties inherent in reporting them, the University provides students with three options in seeking recourse. To fall within the jurisdiction of the University administrative procedures, the alleged sexual assault must have been committed by a student on a student.

COMPLAINT RESOLUTION OPTIONS

A student may choose to initiate disciplinary proceedings through Dean's Discipline, in which case s/he will file a complaint with the Dean of the school of the accused student. Alternatively, a student may choose to file a complaint using the University-wide Disciplinary Procedure. This procedure, established specifically to address allegations of sexual assault, ensures that the members of the committee hearing the case will be specially trained in adjudicating sexual assault. A student who has been found to have violated this policy may be subject to sanctions including, but not limited to, reprimand, disciplinary probation, suspension, and dismissal. A student may also be barred from certain University facilities or activities, or be required to attend education programming. Sanctions are imposed by the Dean of the student's school in accord with University rules. The disciplinary authority of the University is vested by the Trustees in the President and Provost and, subject to their reserved powers, in the Dean of each faculty. A student may seek to pursue a third option, the mediation of sexual assault cases, either through the University Ombuds Office or through the Office of the Disciplinary Procedure for Sexual Assault.

If a member of the community believes s/he has been sexually assaulted by an employee of the University, s/he is advised to contact Helen Arnold, Administrative Coordinator, Disciplinary Procedure for Sexual Assault, 701-A Lerner Hall; (212) 854-1717; hva2002@columbia.edu.

CAMPUS SAFETY AND SECURITY

At Columbia University, the safety and well-being of our students, faculty, and staff is an important priority. Columbia's campuses and their environs are safe and have a relatively low crime rate for an urban university.

The University is required by federal law to publish an annual security report containing information with respect to campus security policies and statistics on the incidence of

certain crimes on and around our campuses. This information is available in FACETS, the University student handbook (<http://www.columbia.edu/cu/facets/>); at the Web site for the United States Department of Education (<http://ope.ed.gov/Security/search.asp>); by requesting a copy of the report from: Campus Crime Report, Department of Public Safety, Columbia University, 111 Low Library, Mail Code 4301, 535 West 116th Street, New York, NY 10027; or on the Public Safety Web site (<http://www.columbia.edu/cu/publicsafety/>).

THE ROMANTIC RELATIONSHIP ADVISORY STATEMENT

Columbia University's educational mission is promoted by the professionalism in its faculty-student and staff-student relationships. Faculty and staff are cautioned that consensual romantic relationships with student members of the University community, while not expressly prohibited, can prove problematic. While some relationships may begin and remain harmonious, they are susceptible to being characterized as nonconsensual and even coercive. This sometimes occurs when such a relationship ends and is exacerbated by the inherent power differential between the parties. A faculty or staff member involved in a consensual relationship with a student is expected to remove him/herself from academic or professional decisions concerning the student. This expectation arises because the relationship may impair, or may be perceived as impairing, a faculty or staff member's ability to make objective judgments about that student. The Provost has authorized some departments to adopt more restrictive policies, given the special nature of the relationship between their students and faculty or staff. Individuals are, therefore, encouraged to contact their department head if they have any questions about whether a more restrictive policy applies to them. Departments that wish to establish more restrictive policies should contact the Associate Provost for Equal Opportunity and Affirmative Action before implementation. Should a romantic relationship with a student lead to a charge of sexual harassment against a faculty or staff member, the University is obligated to investigate and resolve the charge in accordance with the Equal Employment Opportunity and Nondiscrimination Policies and Procedures on Discrimination, Discriminatory Harassment, and Sexual Harassment. Questions regarding this Advisory Statement may be directed to Susan Rieger, Office of Equal Opportunity and Affirmative Action, 103 Low Memorial Library, Mail Code 4333, 535 West 116th Street, New York, NY 10027; 212-854-5511.

RIGHT TO WORK DONE IN SCHOOL

The School reserves the right to retain a copy of any work submitted for credit-drawings, designs, plates, essays, or models, as well as any fellowship competition models—whether submitted by graduates or by students in residence. The material in the Archives is not available to students for reproduction. Students are responsible for documenting their own work and for maintaining a portfolio, updated after each term.

Student Policies and Procedures on Discrimination and Harassment, Gender-Based Misconduct Policies for Students and Consensual Romantic and Sexual Relationships

Columbia University is committed to providing a learning, living, and working environment free from discrimination, harassment and gender-based and sexual misconduct. Consistent with this commitment and with applicable laws, the University does not tolerate discrimination, harassment or gender-based or sexual misconduct in any form and it provides students who believe that they have been subjected to conduct or behavior of this kind with mechanisms for seeking redress. All members of the University community are expected to adhere to the applicable policies, to cooperate with the procedures for responding to complaints of discrimination, harassment and gender-based and sexual misconduct, and to report conduct or behavior they believe to be in violation of these policies to the Office of Equal Opportunity and Affirmative Action or Student Services for Gender-Based and Sexual Misconduct. For additional information on these issues, policies and resources, please visit the Sexual Respect website at: <https://titleix.columbia.edu/>.

Complaints against students for gender-based misconduct are processed in accord with the Gender-Based Misconduct Policies for Students. Students who attend Barnard College and Teachers College as well as Columbia University are covered by these policies. The use of the term "gender-based misconduct" includes sexual assault, sexual harassment, gender-based harassment, stalking, and intimate partner violence.

Complaints against students for other forms of discrimination and harassment are processed in accord with the Student Policies and Procedures on Discrimination and Harassment and should be filed with the Dean of Students of the school in which the accused student is enrolled.

Complaints against employees and third parties affiliated with the University for discrimination and harassment are processed in accord with the Employment Policies and Procedures on Discrimination and Harassment. The use of the term "discrimination and harassment" includes discrimination, discriminatory harassment, gender-based harassment, stalking, intimate partner violence, sexual harassment, and sexual assault.

Columbia University maintains policies regarding consensual romantic and sexual relationships between faculty and students, and staff and students. The Faculty-Student Relationship Policy states that no faculty member shall exercise academic or

professional authority over any student with whom he or she has or previously has had a consensual romantic or sexual relationship. This policy covers all officers of instruction, research and the libraries, including student officers of instruction and research and teaching assistants. The Staff-Student Relationship Policy states that no staff member at Columbia should participate in the supervision, employment actions, evaluation, advising or mentoring of any Columbia University student with whom that staff member has or has had a consensual romantic or sexual relationship, except in unusual circumstances, where explicit advance authorization has been obtained.

For further information and assistance, contact:

Office of Equal Opportunity and Affirmative Action

103 Low Library, MC 4333

<http://eoaa.columbia.edu/>; eoaa@columbia.edu; 212-854-5511

Title IX Coordinator/Section 504 Officer for Columbia University

Melissa Rooker, Associate Provost

Office of Equal Opportunity and Affirmative Action, 103 Low Library

mrooker@columbia.edu, (212) 854-5511

Deputy Title IX Coordinator for Staff and Faculty Concerns

Michael K. Dunn, Director of Investigations

Office of Equal Opportunity and Affirmative Action, 103 Low Library

mkd2010@columbia.edu, (212) 854-6699

Deputy Title IX Coordinator for Student Concerns (temporary)

Virginia Ryan, Interim Assistant Director

Student Services for Gender-Based and Sexual Misconduct, 108I Wien Hall

vmr2105@columbia.edu, (212) 854-1717

Columbia offers a number of confidential resources to students who believe they were subjected to discrimination, harassment or gender-based or sexual misconduct and who do not wish to report to the University.

THE FEDERAL FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The University abides by the provisions of the Federal Family Educational Rights and Privacy Act of 1974. This act ensures a wide range of rights, including but not limited to: information about student records that the University maintains, who maintains them, who has access to them, and for what purposes access is granted. The act also permits the University to release "directory information" without a student's consent. In addition, the act guarantees students access to their records and restricts the access of others.

Students who wish to restrict access to their directory information may do so on the Morningside campus at the Registrar's Office, 205 Kent; students at Columbia University Medical Center may do so at the Registrar's Office located in 1-141 Black Building. The guidelines are available on ColumbiaWeb and in FACETS, the University student handbook (<http://www.columbia.edu/cu/facets/>). Questions about the interpretation of the guidelines should be referred to the University's General Counsel, 412 Low Library.

Statement of Compliance with Laws Promoting Equal Educational Opportunity and Prohibiting Discrimination and Harassment

In accordance with all applicable laws and pursuant to its own policies and operating procedures, Columbia University provides for equal opportunity and prohibits unlawful discrimination and harassment. The applicable laws include:

Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination against any person on the basis of race, color, or national origin in programs or activities receiving federal financial assistance.

Title IX of the Education Amendments of 1972, as amended, prohibits discrimination on the basis of sex in the conduct or operation of a school's educational programs or activities, including admission to these programs and activities.

Section 504 of the Rehabilitation Act of 1973 prohibits the exclusion of any person solely on the basis of a disability from participation in or access to benefits of any federally financed program or activity; it also prohibits discrimination against any person solely on the basis of disability in any federally financed program or activity.

The Americans with Disabilities Act of 1990 prohibits discrimination against persons with disabilities in public accommodation.

The Age Discrimination Act of 1975 prohibits discrimination on the basis of age in programs and activities receiving federal financial assistance.

The New York Executive Law, Article 15, Section 296(4), prohibits an educational institution from denying the use of its facilities to anyone otherwise qualified or permitting harassment of a student or applicant on the basis of color, race, religion, disability, national origin, sexual orientation, military status, sex, age, and marital status.

The New York Education Law, Section 313, as amended, prohibits educational institutions from discriminating against persons seeking admission as students to any institution, program, or course because of race, color, sex, religion, creed, marital status, age, sexual orientation, or national origin.

The New York City Human Rights Law, Section 8-107, prohibits discrimination on the basis of actual or perceived race, creed, color, national origin, age, gender (including gender identity and expression), disability, marital status, partnership status, sexual orientation, or alienage or citizenship status in public accommodations.

Any person wanting to file a complaint under any of these laws should consult the Web site of the relevant government agency listed below: Office of Civil Rights, U.S. Department of Education <http://www.ed.gov/about/offices/list/ocr/index.html> U.S. Department of Justice <http://www.ada.gov/> New York State Department of Human Rights <http://www.dhr.state.ny.us/offices.html> New York City Commission on Human Rights <http://www.nyc.gov/html/cchr/home.html>

Employment Information

JOBS

A job file is kept at the receptionist's desk listing job openings that are occasionally called into the office from architectural firms and related offices in and around the metropolitan area. These include full-time and temporary positions.

No recruiting is done for this job file; all listings are initiated by employers who call the office with the specific intention of hiring students or recent graduates. This means that the percentage of students usually hired from these files is very good. Not infrequently, specific qualifications are requested (e.g., third-year student; at least two years' experience, etc.). Students who desire to work in architecture and related fields should drop by the office and familiarize themselves with the file.

One of the greatest resources of the School is that so many members of the faculty carry on active professional practices in and around New York City.

CENTER FOR CAREER EDUCATION

Each semester the Center for Career Education, through its Graduate Student Career Development department, offers programs and services designed to help graduate students prepare for careers after Columbia. Our programming includes career development workshops, topical career panel presentations, specialized speaker programs, and career fairs, each with a distinctive focus on the needs of master's and Ph.D. candidates, whether they are pursuing careers outside the academy or in academia. Graduate Student Career Development also offers career counseling, on a walk-in or by appointment basis, as well as psychometric testing. Our emphasis is on helping students develop the tools and self-awareness that will enable them to find the job they want.

The Center provides distinctive career services to undergraduates and alumni of Columbia, as well as to graduate students. Through its Employer and Alumni Relations department it maintains relationships with potential employers of Columbia students and coordinates recruiting events on campus. More generally, the Center offers a Career Resource Center for research into career options, as well as an Internet-based job posting service (ColumbiaTRAK and InterviewTRAK) listing full-and part-time employment opportunities as well as internships. Through the Center's Web site (<http://careereducation.columbia.edu/>), upcoming career events are calendared, news of interest to job seekers is posted, and a wide range of information resources are available to assist in career exploration, preparation, and assessment. The Center encourages students to register on its Web site-and to check the Web site frequently-to ensure they stay up to date with Center events and resources.

We strongly encourage students to explore the career resources available to them through our Web site and by visiting the Center, which is located in East Campus, Lower

Level, or by making an appointment to meet with a career counselor by calling 212-854-5609 for an appointment.

JOB FAIR

In the spring of each year, architecture students have run a job fair to which representatives from leading regional offices are invited for the purpose of interviewing students for summer and full-time postgraduate employment. This fair is initiated and run entirely by students. Coordination of rooms for interviews, etc., should be done through the Dean's Office.

URBAN PLANNING JOB PLACEMENT

The Urban Planning Program has its own placement center. Students seeking either part-time or postgraduate employment are urged to consult the Job Book on the north side of 400 Avery. The Urban Planning Program receives numerous job announcements and job-listing publications, which are collected. In addition, information on internships is available to urban planning students.

HISTORIC PRESERVATION JOB PLACEMENT

Job and internship books are available in the Preservation Office. Announcements regarding job and internship opportunities are posted regularly.

REAL ESTATE DEVELOPMENT JOB PLACEMENT

The Job Placement Committee identifies potential firms for recruiting and for career discussion panels scheduled on Wednesday evenings.

Academic Calendar: 2013-2016*

The following Academic Calendar was correct and complete as of November 2013; however, the University reserves the right to revise or amend it, in whole or in part, at any time. Information on the current status of the Academic Calendar may be obtained in the Office of the Registrar, 205 Kent; 212-854-1458; <http://www.columbia.edu/cu/registrar/>.

Major Religious Holidays

For a statement of University policy regarding holidays, see Religious Holidays under Official Regulations. The Jewish and Islamic holy days begin at sundown of the preceding day. The exact dates for the Islamic holy days may vary by one or two days from the estimated dates given below.

2013-2014

Eid al-Fitr: Thursday, August 8

Rosh Hashanah: Thursday, September 5 and Friday, September 6

Yom Kippur: Saturday, September 14

First days of Sukkot: Thursday September 19 and Friday, September 20

Concluding days of Sukkot: Tuesday, September 24 and Wednesday, September 25

Eid al-Adha: Tuesday, October 15

All Saints' Day: Friday, November 1

Immaculate Conception: Monday, December 9

Christmas: Wednesday, December 25

Lunar New Year: Friday, January 31

Ash Wednesday: Wednesday, March 5

Good Friday: Friday, April 18

Orthodox Good Friday: Friday, April 18

Easter: Sunday, April 20

Orthodox Easter: Sunday, April 20

First days of Passover: Tuesday, April 14 and Wednesday, April 15

Concluding days of Passover: Monday, April 21 and Tuesday, April 22

Ascension: Thursday, May 29

Shavuot: Wednesday, June 4 and Thursday, June 5

*The Academic Calendar is subject to review and possible modification by the School; 2013-2016 dates are provided as complete as possible as of publication of this Bulletin.

Summer Term 2013

Late registration includes payment of an additional fee.

Wednesday, May 29 - Friday, May 31	Registration
Wednesday, June 5	First Day of Class Arch. Studio Presentations & Lottery
Wednesday, June 5 - Friday, June 14	Change of Program
Friday, June 14	Last Day to Add/Drop with refund
Monday, July 1	Introduction to Architecture Registration & First Day of Class
Wednesday, July 3	Last Day to Add/Drop Introduction to Architecture
Thursday, July 4 - Friday, July 5	University Holiday
Thursday, July 11	Last Day to Drop a Class
Friday, August 2	Last Day of Introduction to Architecture
Monday, August 5 - Friday, August 9	Final Review Week
Friday, August 16	Last Day of Classes
Grades Due	Wednesday, August 21

Fall Term 2013

Late registration includes payment of an additional fee.

Tuesday, August 27 - Thursday, August 29	Registration
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Wednesday, August 28	UP Orientation
Thursday, August 29	HP Orientation
Friday, August 30	NY/Paris Orientation
	M.Arch Orientation
Tuesday, September 3	First Day of Classes
Tuesday, September 3 (6:00pm)	Visual Studies Presentations
Wednesday, September 4 (2:00pm)	All-School Orientation
Wednesday, September 4 (4:00pm)	Arch. Studio Presentations & Lottery
Friday, September 6 (1:00pm)	Arch. Faculty Meeting
Session A: 9/3 - 10/18	Mini Sessions
Session B: 10/21 - 11/29	
Tuesday, September 3 - Friday, September 13	Change of Program
Friday, September 13	Last day to Add/Drop with refund
Session A: 9/13	Last Day for All Mini Sessions Registration Changes - Add/Drop
Session B: 10/25	
Monday, October 21 - Friday, October 25	Arch. Midterm Reviews
Monday + Tuesday, November 4 - 5	Election Day Holidays
Thursday, November 14	Last Day to Drop a Full Semester Class
Friday, November 29	Last Day of Architecture Classes
Thursday + Friday, November 28 - 29	Thanksgiving Break

Monday, December 2 - Friday, December 6 Final Review Week

Monday, December 9 Last Day of HP, UP, RED classes

Monday, December 9 - Wednesday, December 18 Exam + Paper Week

Wednesday, December 18 Grades Due

Spring Term 2014

Late registration includes payment of an additional fee.

Wednesday, May 28 - Friday, May 30 Registration

Tuesday, January 21 First Day of Classes

Wednesday, January 22 (1:00pm) Arch. Faculty Meeting

Wednesday, January 22 (2:00pm) Arch. Studio Presentations + Lottery

Tuesday, January 28 MArch Student Meeting (MArch 1st-3rd yrs)

Session A: 1/21 - 3/7 Mini Sessions

Session B: 3/10 - 4/25

Tuesday, January 21 - Friday, January 31 Change of Program

Friday, January 31 Last day to Add/Drop with refund

Session A: 1/31 Last Day for All Mini Sessions
Registration Changes - Add/Drop

Session B: 3/28

Monday, February 24 - Friday, March 7 Arch. Midterm Reviews

Monday, March 17 - Friday, March 21 Spring Break

Thursday, March 27	Last Day to Drop a Full Semester Class
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Friday, April 25	Last Day of Architecture Classes
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Monday, April 28 - Friday, May 2	Final Review Week
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Monday, May 5	Last Day of HP, UP, RED classes
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Monday, May 5 - Friday, May 9	Exam + Paper Week
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Monday, May 12 - Tuesday, May 13	Comprehensive Reviews (MArch 2nd yrs)
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Wednesday, May 14	Grades Due
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Wednesday, May 14 (10:00am)	Arch. Portfolios Due (graduating students)
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Wednesday, May 14 (12:00pm)	Full-time Faculty Meeting
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Wednesday, May 14 (1:00pm)	Arch. Awards Meeting
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Saturday, May 17 (5:00pm)	Opening of End of Year Show
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Wednesday, May 21	Graduation Day
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Summer Term 2014

Late registration includes payment of an additional fee.

Wednesday, May 28 - Friday, May 30	Registration
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Wednesday, June 4	First Day of Class Arch. Studio Presentations & Lottery
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Monday, June 2 - Friday, June 13	Change of Program
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Friday, June 13	Last Day to Add/Drop with refund
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Monday, July 7	Introduction to Architecture Registration & First Day of Class
Wednesday, July 9	Last Day to Add/Drop Introduction to Architecture
Thursday, July 10	Last Day to Drop a Class
Friday, August 8	Last Day of Introduction to Architecture
Monday, August 4 - Friday, August 8	Final Review Week
Friday, August 15	Last Day of Classes
Grades Due	Wednesday, August 20

Fall Term 2014

Late registration includes payment of an additional fee.

Tuesday, August 26 -Thursday, August 28	Registration
Wednesday, August 27	UP Orientation
Thursday, August 28	HP Orientation
Friday, August 29	NY/Paris Orientation M.Arch Orientation
Tuesday, September 2	First Day of Classes
Tuesday, September 2 (6:00pm)	Visual Studies Presentations
Wednesday, September 3 (2:00pm)	All-School Orientation
Wednesday, September 3 (4:00pm)	Arch. Studio Presentations & Lottery

Friday, September 5 (1:00pm)

Arch. Faculty Meeting

Session A: 9/2 - 10/17

Mini Sessions

Session B: 10/20 - 11/28

Tuesday, September 2 - Friday,
September 12

Change of Program

Friday, September 12

Last day to Add/Drop with refund

Session A: 9/12

Last Day for All Mini Sessions
Registration Changes - Add/Drop

Session B: 10/24

Monday, October 20 - Friday, October 24

Arch. Midterm Reviews

Monday + Tuesday, November 3 - 4

Election Day Holidays

Thursday, November 13

Last Day to Drop a Full Semester Class

Wednesday, November 26

Last Day of Architecture Classes

Thursday + Friday, November 27 - 28

Thanksgiving Break

Monday, December 1 - Friday, December 5

Final Review Week

Monday, December 8

Last Day of HP, UP, RED classes

Monday, December 8 - Wednesday,
December 17

Exam + Paper Week

Wednesday, December 17

Grades Due

Disability Services

The Office of Disability Services (ODS) empowers students with disabilities to realize their academic and personal potential by facilitating equal access and coordinating reasonable accommodations and support services for eligible students.

Reasonable accommodations are adjustments to policy, practice, and programs that “level the playing field” for students with disabilities and provide equal access to Columbia’s programs and activities. Examples include the administration of exams, services such as note-taking, sign language interpreters, assistive technology, and coordination of accessible housing needs. Accommodation plans and services are custom designed to match the disability-related needs of each student and are determined according to documentation and the student’s program requirements.

Registration includes submission of both the Application for Accommodations and Services and disability documentation. The application and disability documentation guidelines are available online and at the ODS office. Students are encouraged to register within the first two weeks of the semester to ensure that reasonable accommodations can be made for that term. Please note that students are not eligible to receive reasonable accommodations until the registration process is complete.

Disability Services Liaisons are representatives from the student’s respective school and assist ODS in coordinating the provisions of reasonable accommodations.

For further information, contact the Columbia University Office of Disability Services: 212-854-2388; 212-854-2378 (TTY); 212-854-3448 (fax); disability@columbia.edu; www.health.columbia.edu. The Morningside campus office is located at 801 Lerner, MC 2605, 2920 Broadway, New York, NY 10027. The Medical Center campus office is located at 101 Bard Hall, 50 Haven Avenue, New York, NY 10032

Portfolio Advising (Architecture)

Members of the design faculty are available for consultation and compiling portfolios.

Governance: Schoolwide and Program Committees

Schoolwide Committees

FACULTY

Full faculty meetings normally take place once a year chaired by the President of the University or the Provost. The faculty is responsible for approving the requirements of admissions, the programs of study, and the conditions of graduation. The faculty consists of full-time and invited part-time faculty members.

COMMITTEE ON INSTRUCTION

The Committee on Instruction acts in an advisory capacity to the dean on education policy and curriculum. It is responsible under the dean and subject to approval by the full faculty for authorizing changes in course offerings. The Committee on Instruction consists of the dean, who serves as chair; the associate dean (ex-officio), as designated by the dean; six full-time faculty members; and four elected students.

COMMITTEE ON ADMISSIONS AND FINANCIAL AID

This committee determines which applicants shall be admitted in the various programs within the School. It may delegate part of its function to subcommittees. It consists of the dean and the associate dean for admissions, and all program directors. Subcommittees may include full-time as well as part-time faculty members and graduating students.

COMMITTEE ON STUDENT PERFORMANCE

This committee is an appeals committee acting on matters involving (a) advanced standing and (b) students with unsatisfactory academic records. This committee consists of the dean, the associate dean for admissions, and three members of the faculty as designated by the dean.

COMMITTEE ON FELLOWSHIPS AND AWARDS

This committee acts on all matters related to student awards, scholarships, fellowships, prizes, and grants. It may delegate part of its function to subcommittees. It consists of the dean, the senior associate dean (ex-officio), and all program directors.

DIRECTORS' COMMITTEE

This committee develops pedagogical policy in accordance with the overall goals of the School and the requirements set by the faculty and the various School committees. It consists of the dean, who serves as chairman, and all program directors, as appointed

by the dean and confirmed by the faculty of their respective programs.

EXECUTIVE COMMITTEE

This committee acts in an advisory capacity to the dean on tenure and promotional procedures within the School. The committee consists of the tenured members of the faculty. Program Committees Architecture Committee on Fellowships and Awards This committee acts on matters related to student awards, scholarships, fellowships, prizes, and grants in the M.Arch., M.S. Advanced Architecture Degree, and Urban Design Programs. It also acts on the dispersal of William Kinne Fellow funds allocated to the M.Arch. Program. It decides on the method of allocation, supervises the program of M.Arch. noncompetitive grants, and judges applications for the competitive graduate fellowships. It also chooses the student nominees for the SOM Foundation Fellowship Awards, and any other architectural awards. The committee consists of the dean, architecture program directors, and three invited full-time or part-time faculty members.

ARCHITECTURE COMMITTEE ON INDEPENDENT DESIGN OPTION

Consists of the dean and Architecture Program directors.

ARCHITECTURE HISTORY/THEORY COMMITTEE

Consists of the dean and History/Theory faculty.

ARCHITECTURAL BUILDING TECHNOLOGIES COMMITTEE

Consists of the dean and selected Building Technologies faculty.

ARCHITECTURE FACULTY

The entire architecture faculty meets once, usually close to the beginning of the term. In addition, there may be full-time faculty meetings during the term.

ARCHITECTURE PROGRAM COUNCIL

The program council is an advisory body that may initiate and deliberate questions of policy concerning the goals, structures, curriculum, and programs as well as admissions, recruitment of faculty, and operating procedures of the program. The council also makes recommendations to the Committee on Instruction regarding changes in curriculum. Matters requiring further action (e.g., changes in curriculum) are submitted directly to the dean and faculty as necessary. The council consists of the dean, the architecture directors or their representatives, and two student members from each year of each architecture program. The student representatives are elected each year during the first or second meeting of the Studio. The representatives serve for a year. The council elects a chairperson for the year who is responsible for calling and chairing meetings, which are held on a regular basis. One of the student members will be elected as secretary to the council and will aid the chairperson of the council with the scheduling of meetings,

the preparation of agenda, and the recording and posting of minutes. The agenda includes items selected by council members from student suggestions. The council is responsible for the communication of all its decisions and discussions to the student body.

URBAN PLANNING PROGRAM COUNCIL

The program council is an advisory body that initiates and deliberates questions of policy concerning the goals, structures, curriculum, and programs as well as admissions, recruitment of faculty, and operating procedures of the program. The council also makes recommendations to the Committee on Instruction regarding changes in curriculum. Matters requiring further action (e.g., changes in curriculum) are submitted directly to the director of the program or forwarded to the dean and faculty as necessary.

The Urban Planning Program Council is composed of two student representatives from each year of the Urban Planning Program, one student from the Ph.D. Program, and at least two full-time faculty members. A student serves as the convener of the council.

Council meetings, announced by public notice, are open to all students in the Urban Planning Program; however, only elected representatives may vote. The council elects a chairperson for the year who is responsible for calling and chairing meetings, which are held on a regular basis. One of the student members will be elected as secretary to the council and will aid the chairperson of the council with the scheduling of meetings, the preparation of agenda, and the recording and posting of minutes. The agenda includes items selected by council members per students' suggestions. The council is responsible for the communication of all its decisions to the student body.

AMERICAN PLANNING ASSOCIATION

Each year one faculty member and one student are chosen to serve as APA representatives. They are the liaisons between the association and the Urban Planning Program: students should contact them for any information on APA events or programs.

URBAN PLANNING FACULTY

The full-time faculty of the Urban Planning Program meets once a month. The director of the Urban Planning Program meets with all other program directors once a month.

HISTORIC PRESERVATION PROGRAM COUNCIL

Four members of the program council are elected by the respective students in the first- and second-year classes. Directly after classes begin, the first-year class elects three people to represent that class. The program council meets with the director and faculty two or three times during the course of a term. An agenda is set between the faculty and the program council before the meetings. The stated purpose of the program council-

but not limited to this purpose only-is as follows: 1. to review and advise on program curriculum planning; 2. to prepare and analyze course evaluations; 3. to bring matters of concern to students about the program to the attention of the director and the faculty.

REAL ESTATE STUDENT COMMITTEES

Student committees of the Real Estate Development Association are charged with both advising and administering certain activities in the program. The Lecture Series Committee assists in the operation of the Fall Lecture Series and also plans and organizes the Spring Lecture Series. The Job Placement Committee identifies potential firms for recruiting and for career discussion panels scheduled on Wednesday evenings. The Student Admissions Committee is formed in the spring term to assist in the admissions process for the following year and advise on admissions for potential candidates.

FACULTY OF ARCHITECTURE, PLANNING AND PRESERVATION

Lee C. Bollinger, J.D. *President of the University*

Mark Wigley *Dean of the Faculty of Architecture, Planning and Preservation*

Amale Andraos *Assistant Professor of Architecture*

B.Arch., McGill University, 1996; M.Arch., Harvard University, 1999. Trott Professor of Architecture, OSU, 2006; Herbert Baumer Distinguished Visiting Professor, OSU, 2008. Architectural League of New York, Board Member.

Robert A. Beauregard *Professor of Urban Planning*

B.Arch., Rhode Island School of Design, 1969; Ph.D. (City and Regional Planning), Cornell, 1975. Harvey S. Perloff Endowed Chair: visiting professor, UCLA, 1994; docent professor, Department of Social Policy, University of Helsinki, 2003-present; visiting professor, Department of Geography, King's College, London, 2007-2010.

Michael Bell *Professor of Architecture, Director of Core Studios*

B.S., Catholic University of America, 1983; M.Arch., University of California, Berkeley, 1987. Progressive Architecture Design Award and Citation, 1991, 1992, 1996, 2001; Graham Foundation Grant, 1997, 2003; Emerging Voices Award, Architectural League of New York, 1999.

Vishaan Chakrabarti *Marc Holiday Associate Professor of Real Estate Development*

Andrew S. Dolkart *Fitch Associate Professor of Historic Preservation, Director of Historic Preservation*

B.A., Colgate, 1973; M.S., Columbia, 1977. Association of American Publishers Publication Award, 1998; A.I.A. New York Chapter Special Citation, 1999; James Marston Fitch Foundation Mid-Career Fellowship, 2001; member, Municipal Art Society Preservation Committee; chair, Committee on Cultural Landmarking; board of directors, Landmarks West.

Kenneth Frampton *Ware Professor of Architecture*

Dipl. Arch., Dipl. Trop., Architectural Association (London), 1956; A.R.I.B.A., 1957; Honorary Doctorate of Technology, Royal Institute of Technology, Stockholm, 1991; Honorary Doctorate in Environmental Studies, University of Waterloo, 1995; Honorary Doctorate in Environmental Studies, California College of the Arts and Crafts, 1999. Medaille d'Or, Academie d'Architecture Paris, 1987; ACSA Topaz medal for excellence in architectural education, 1990; associate of the A.I.A., 1993; fellow, American Academy of Arts and Sciences, 1993; member, Russian Academy of the Constructional Science,

1995.

Lance Freeman *Assistant Professor of Urban Planning*

B.S., State University of New York (Buffalo), 1987; M.R.P., University of North Carolina at Chapel Hill, 1991; Ph.D., 1997. Member, American Planning Association; member, Urban Affairs Association.

Cyril M. Harris *Special Lecturer in Architecture; Professor Emeritus of Architecture and Charles Batchelor Professor Emeritus of Electrical Engineering*

B.A., California (Los Angeles), 1938; M.A., 1940; Ph.D., M.I.T., 1945; Sc.D. (hon.), New Jersey Institute of Technology, 1981; Sc.D. (hon.), Northwestern, 1989. Franklin Medal, 1977; Wallace Clement Sabine Medal, 1979; A.I.A. Medal, 1980; gold medal, Audio Engineering Society, 1984; gold medal, Acoustical Society of America, 1987; Pupin Medal, Columbia University, 1999. Member, National Academy of Engineering; National Academy of Sciences.

Laurie Hawkinson *Professor of Architecture*

B.A., California (Berkeley), 1974; M.A., 1975; B.Arch, Cooper Union, 1983. Grant, New York State Council on the Arts; Board of Directors, Architectural League of New York; N.C.A.R.B. certificate. Grant, Graham Foundation for Advanced Studies in Architecture and the Fine Arts, 1999. Registered architect.

Steven Holl *Professor of Architecture*

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B.Arch., Cornell, 1994; M.Arch., 1995; Ph.D. (in Architecture), M.I.T., 2002. Angel Ramos Foundation Research Grant, 1995; Schlossman Dissertation Fellowship, 2000; Graham Foundation for Advanced Studies in the Fine Arts, 2004. Postdoctoral Fellow, American Scandinavian Foundation, 2004; Postdoctoral Fellow, Canadian Center for Architecture, 2005. Hyzen Dissertation Award, 2000; Henry Luce Foundation, Dissertation Research Award, 2000; New York State Council for the Arts, 2003; Lawrence B. Anderson, M.I.T. Alumni Award, 2004. Member, DoCoMoMo National Board.

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B.Arch., Royal Melbourne Institute of Technology, 1991; B.Sc. (History and Philosophy of Science), University of Melbourne, 1991; M.A.U.D., Harvard, 1994; M.A. (Architecture), Princeton, 1997; Ph.D., 2001. J. Paul Getty Postdoctoral Fellowship in the History of Art and the Humanities, 2002-2003; Henry Luce/ACLS Doctoral Dissertation Fellowship in American Art, 1998-1999; Harold W. Dodds Fellowship, Princeton, 1997-1998.

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B.S.Arch., City College, City University (New York), 1991; M.Arch., Columbia, 1994. McKim Prize for Excellence in Design, National Endowment for the Arts grant, 2000; Architectural Record Design Vanguard, 2003; Architectural League Emerging Voices, 2002. Board member, Tenement Museum. New York Registered architect.

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B.A., Smith College, 1991; M.S., Yale University, 1993; Certificat, Institut Universitaire de Hautes Etudes Internationales (Geneve, Suisse), 2000; Ph.D., M.I.T., 2004. Pre- and post doctoral fellowships, Harvard, 2002-2005. Nominated member, Sigma Xi.

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B.Arch., University of Auckland (New Zealand), 1979; Ph.D., 1987. Resident fellowship, Chicago Institute for Architecture and Urbanism, 1989; International Committee of

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B.A., New York University, 1969; M.Arch., California (Berkeley), 1974; Ph.D., 1978. Woodrow Wilson Fellowship, 1977; Ford Foundation Fellowship, 1979-1980; NEH Fellowship, 1980-1982; Stanford Humanities Center Fellowship, 1982-1983; University of Michigan, Institute for the Humanities Fellowship, 1991; Getty Center for the History of Art and the Humanities Fellowship, 1992-1993; New York Institute for the Humanities Fellow, 1983-1992; Guggenheim Fellow, 2004-2005.

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B.A. (Photography), Athens Technical Institution, 1992; M.A., Goldsmiths College, University of London, 1998. Fulbright Artist Award in Architectural Photography, 2000-2001; Japan Foundation Artist Fellowship, 2002-2003; Graham Foundation recipient, 2004.

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B.Arch., Cooper Union, 1982. Fellowship, New York Foundation for the Arts, 1986, 1992. Emerging Voices Award, Architectural League of New York, 1992. The Cooper Union Citation for Contribution to the Field of Architecture, 1992, 1994. Vice chair, Van Alen Institute; trustee, The Cooper Union. Co-chair, Chrysler Design Awards.

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B.Eng. in Arch., Tokyo Institute of Technology, 1963; M.Eng. in Arch., 1965; Dr.Eng. in Arch., 1969; M.A.U.D., Harvard, 1978. Regional Science Research Fellow, University of Pennsylvania, 1969-1971; American Study Fellow, Brown, 1977-1978; associate professor of architecture, Nagoya Institute of Technology, 1972-1981; visiting professor, Nova Scotia Technical College, Canada, 1980. Registered architect, Japan and U.S.A.

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University of Applied Arts Vienna, 2012. Founder and CEO of CaK Productions, 2004.

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Geeta Mehta, PhD., University of Tokyo, 1998. A.I.A

Lee Miller *Adjunct Professor of Urban Planning*

BA Rutgers, Summa Cum Laude, 1973, JD Harvard Magna Cum Laude, 1976, Phi Beta Kappa, co-authored A Woman's Guide to Successful Negotiating selected by Atlanta Woman Magazine as one of the 50 best books for professional women

Adam Modesitt *Adjunct Assistant Professor of Architecture*

Edward Mohylowski *Adjunct Assistant Professor of Historic Preservation*

Justin Garrett Moore *Adjunct Assistant Professor of Urban Design*

B.Des., University of Florida, 2001; M.Arch., M.S.AUD Columbia, 2004

John Morrison *Adjunct Assistant Professor of Architecture*

Jennifer Most *Adjunct Assistant Professor of Historic Preservation*

Junko Nakagawa *Adjunct Assistant Professor of Architecture*

B.Arch., Washington University in St. Louis, 1997; M.Arch., Massachusetts Institute of Technology, 2002. Registered architect.

Federico Negro *Adjunct Assistant Professor of Architecture*

Anton Nelson *Adjunct Assistant Professor of Architecture*

Mitchell Nelson *Adjunct Assistant Professor*

Christopher Neville *Adjunct Associate Professor of Historic Preservation*

B.A., Amherst, 1984; M.S.H.P., Columbia, 1994

Philip Nobel *Adjunct Assistant Professor of Architecture*

Davidson Norris *Adjunct Associate Professor of Architecture*

B.A., Williams College, 1970; M.Arch., Yale, 1977. Award of Merit, ASES/Progressive Architecture, 1982; Presidential Design Award, NEA, 1988; fellow, New York Foundation for Arts, 1989; Individual Project Award, NEA, 1990; fellow, MacDowell Colony, 1991; Merit Award, National Trust for Historic Preservation, 1991; Project Award, New York State Council on the Arts, 1992. IESNA, North American Sundial Society. Registered architect.

Nadereh Nouhi *Adjunct Assistant Professor*

Roger Nussenblatt *Adjunct Assistant Professor*

Elisa Orlanski Ours *Adjunct Assistant Professor*

Roberto Otani *Adjunct Assistant Professor of Architecture*

Robert M. Paley *Adjunct Assistant Professor of Real Estate Development*

B.A., Yale, 1976; M.B.A., 1982.

Philip Parker *Adjunct Assistant Professor of Architecture*

Bachelor of Design in Architecture, University of Florida, 1978; M.Arch., Yale, 1984. Registered architect.

Raj Patel *Adjunct Assistant Professor of Architecture*

1993 B.Eng, University of Southampton ISVR, Chartered Engineer, Fellow Institute of Acoustics

Richard D. Pieper *Adjunct Assistant Professor of Historic Preservation*

B.A., Cornell, 1971, Rumsey Scholar. ICCROM (Rome), 1981; UNESCO (Venice) Fellow, 1985. Vice chairman, US/ICOMOS. Trustee, Historic Preservation Education Foundation.

Edward Poteat *Adjunct Assistant Professor*

Jennifer Preston *Adjunct Assistant Professor of Architecture*

Theodore H. M. Prudon *Adjunct Associate Professor of Historic Preservation*

M.A., Delft University of Technology, 1969; M.S., Columbia, 1972; Ph.D., 1981. William F. Kinne Fellows Traveling Fellow, 1972. Member, Royal Dutch Society of Architects. N.C.A.R.B. certificate.

Sarah Queen *Adjunct Assistant Professor*

Nicholas Quennell *Adjunct Associate Professor of Architecture*

Dipl. Arch., Architectural Association (London), 1957; M.L.A., Harvard, 1969. Fellow, American Society of Landscape Architects; Architectural Association (London). Registered architect, New York, New Jersey, Pennsylvania, United Kingdom. Registered landscape architect, New York, Massachusetts, Connecticut, North Carolina. N.C.A.R.B. certificate. C.L.A.R.B. certificate. Former member, New York City Art Commission.

Mark Rakatansky *Adjunct Associate Professor of Architecture*

B.A., California (Santa Cruz), 1979; M.Arch., California (Berkeley), 1982. Fellow, Chicago Institute for Architecture and Urbanism, 1988-1989. Progressive Architecture Award, 1992; Emerging Voices, Architectural League of New York, 1995; ID Annual Design Award, 1995; American Center for Design 100 Show Award, 1996, 1998; National Art and Design Competition for Street Trees Award, 1998; PRINT Digital Design & Illustration Award, 1998; Selected Project, The City: Third Millennium, Venice Biennale: 7th International Exhibition of Architecture, 2000.

Raquel Ramati *Adjunct Professor of Real Estate Development*

B.A.Arch., Pratt Institute. Loeb Fellow, Harvard, 1975. Director of Urban Design Group, New York Dept. of City Planning, 1971-1981. Member, A.I.A.; vice chair, Urban Redevelopment Council, Urban Land Institute; board member, Israel Environmental Council; Program Committee, Women's Forum.

Jeffrey Raven *Adjunct Assistant Professor of Urban Design*

Dahlia Roberts *Adjunct Assistant Professor of Architecture*

Scott Robinson *Adjunct Assistant Professor*

Francois Roche *Adjunct Assistant Professor of Architecture*

Michael Rock *Director of Graphical Architecture Studies*

Gary Roth *Adjunct Assistant Professor of Urban Planning*

B.A. Economics, Boston University, 1987; M.S. Computer Information Systems, Baruch College, 2000; M.S.Urban Planning, Columbia University, 2004. Urban Planning Award for Outstanding Contribution to Leadership in Planning Education, 2004

Karla Maria S. Rothstein *Adjunct Associate Professor of Architecture*

B.S.Arch., University of Maryland, 1988; M.Arch., Columbia, 1992. Jacob K. Javits Fellow, 1988-1992; William Kinne Traveling Fellow, 1992; joint fellowship in Architecture, New York Foundation for the Arts, 2000; Progressive Architecture Design Award Citation, 2001. Registered architect, Berlin, Germany.

Lindy Roy *Adjunct Assistant Professor of Architecture*

Westly Rozen *Adjunct Assistant Professor of Architecture*

Frank Ruchala *Adjunct Assistant Professor of Urban Design*

Yehuda Safran *Adjunct Associate Professor of Architecture*

St. Martin School of Art, London, 1970; M.A., Royal College of Art, London, 1972; University College, 1975. Fellowship, Chicago Institute of Architecture and Urbanism, National Endowment for the Arts, 1989. Member, College International de Philosophie.

Austin Eun Sakong *Adjunct Assistant Professor of Urban Design*

Victoria Sanger *Adjunct Assistant Professor of Architecture*

Paula Schaefer *Adjunct Assistant Professor*

Andrew Scherer *Adjunct Professor of Urban Planning*

B.A., University of Pennsylvania, 1972; J.D., New York University School of Law, 1978. Executive director, Legal Services for New York City.

Edwin Schlossberg *Adjunct Professor of Architecture*

B.A., Columbia University, New York, NY, 1967; Masters in Science and Literature, Columbia University, New York, NY, 1969; Doctor of Philosophy, Columbia University, New York, NY, 1971. Member - The U.S. Commission of Fine Arts, Washington, DC.

Veronika Schmid *Adjunct Assistant Professor of Architecture*

AADipl, Architectural Association London, 1998; M.Arch II, UCLA, 2001.

David Schankenberg *Adjunct Assistant Professor of Historic Preservation*

Craig Schwitter *Adjunct Assistant Professor of Architecture*

Laila Seewang *Adjunct Assistant Professor of Architecture*

B.Sc. (Env.Des), University of Tasmania, 1999; B.Arch., The Cooper Union, 2005; M.Arch., Princeton University, 2008. Registered architect.

Paul Segal *Adjunct Professor of Architecture, IDP Coordinator*

M.F.A., Princeton, 1969. Fellow, A.I.A. N.C.A.R.B. certificate. President, New York Chapter, A.I.A., 1985-1986; trustee, Preservation League of New York State; president, New York Foundation for Architecture. Registered architect.

Suhrita Sen *Adjunct Assistant Professor*

David Grahame Shane *Adjunct Professor of Architecture*

Dipl. Arch., Architectural Association (London), 1968; M.Arch., Cornell, 1971; Ph.D., 1978.

Donald Sheets *Adjunct Assistant Professor of Real Estate Development*

B.B.A. Magna Cum Laude, George Washington University, 1999; M.B.A., Harvard

Business School, 2006

Ethel Sheffer *Adjunct Assistant Professor of Urban Planning*

Cassim Shepard *Adjunct Assistant Professor of Architecture*

B.A., Harvard University, 2001; M.A., University of London, Kings College, 2004; M.C.P., Massachusetts Institute of Technology, 2007.

Daniel Sherer *Adjunct Assistant Professor of Architecture*

B.A., Yale, 1985; Ph.D., Harvard, 2000. James B. Duke Fellow in the Humanities, 1987-1988; Mellon Fellow in the History of Art, Harvard, 1992-1995; Charles Eliot Norton Travelling Fellow, Harvard, 1993; Oscar Cutler Fellow, Harvard, 2000.

Sho Shigematsu *Adjunct Associate Professor of Architecture*

Robert Silman *Adjunct Professor of Architecture and Historic Preservation*

Bachelor of Arts, Cornell University, 1956; Bachelor of Civil Engineering, New York University, 1960; Master of Civil Engineering, New York University, 1963. Honary Member - AIA NY, ASCE - Fellow.

Joel M. Silverman *Adjunct Associate Professor of Real Estate Development*

B.E. (E.E.), City College of New York, 1972. Licensed professional engineer: New York, 1977, New Jersey, 1988, Pennsylvania, 1995. President, HRH Construction Corp., 1978-1999; president, Silverman Associates, 1999-present.

Julie Sloan *Adjunct Associate Professor of Historic Preservation*

Danielle Smoller *Adjunct Associate Professor of Architecture; New York Co-Director, New York/Paris Program*

B.A., Skidmore, 1987; M.Arch., Columbia, 1991.

Roland Snooks *Adjunct Assistant Professor of Architecture*

Angela Chen-Mai Soong *Adjunct Assistant Professor of Urban Design*

Smita Srinivas *Assistant Professor of Urban Planning*

Manish Srivastava *Adjunct Assistant Professor*

Morana Stipisic *Adjunct Assistant Professor of Urban Design*

Stacey Sutton *Assistant Professor of Urban Planning*

John T. Szot *Adjunct Associate Professor of Architecture*

B.Arch., University of Texas (Austin), 1998; M.S., Columbia (GSAPP), 2001. Executive director, Experimental Modern Arts Collective.

Mark Taylor *Director, Operations*

Neil Thelen *Adjunct Assistant Professor of Architecture*

Helen Thomas *Adjunct Assistant Professor of Historic Preservation*

Ada Tolla *Adjunct Assistant Professor of Architecture*

Master of Architecture and Urban Design, Universit di Napoli, Italy, 1989.

Paula Tomisaki *Adjunct Assistant Professor of Architecture*

M.Arch., Moron University, Buenos Aires, Argentina, 2000;

M.S. AAD., Columbia University, 2006. Registered architect in Argentina.

Graham L. Trelstad *Adjunct Assistant Professor of Urban Planning*

B.A., Columbia, 1989; M.S., Yale, 1994. Member, AICP, A.P.A., Urban Land Institute.

Marc Tsurumaki *Adjunct Assistant Professor of Architecture*

B.S., University of Virginia; M.Arch., Princeton, 1991.

Anthony Tung *Adjunct Assistant Professor of Architecture*

Nicola Twilley *Adjunct Assistant Professor of Architecture, Director of Studio-X*

Christian Uhl *Adjunct Associate Professor of Architecture,*

Bachelor of Arts in Painting, Miami University, 1988-1993; Bachelor of Environmental Design, Architecture, Miami University, 1988-1993; Master of Architecture, Architectural Design, Bartlett School of Architecture, UCL 1998, 1999 graduated with award of distinction in design; The Independent Study Program, Whitney Museum, New York City, 1999, 2000. Registered architect.

Joshua Uhl *Adjunct Assistant Professor of Architecture*

B.Env.Design, Miami, 1995; M.Arch., Columbia, 2002. McKim/Kaplan Prize, 2002; SOM Traveling Fellowship, 2002. Member, AIA. Registered architect.

Anne Van Ingen *Adjunct Assistant Professor of Historic Preservation*

Kazys Varnelis *Adjunct Assistant Professor of Architecture, Director of Network Architecture Research Lab.*

A.A, Social Sciences, Simon's Rock at Bard College, 1986; B.S. the History of Architecture, Cornell University, 1988; M.A., History of Architecture and Urban Development, Cornell University, 1990; Ph.D. History of Architecture and Urbanism, Cornell University 1994.

Aniju Varughese *Adjunct Assistant Professor of Architecture*

M.S.C.E., Columbia University, 2005; M.S.C.E., Cooper Union, 2002

Joseph Vidich *Adjunct Assistant Professor of Architecture*

B.A., Wesleyan University, 2000; M.Arch, GSAPP, Columbia University, 2008.

Daniel Vos *Adjunct Assistant Professor of Architecture*
B.A., Calvin College, 1999; M.Arch., Columbia, 2004.

Enrique Walker *Adjunct Assistant Professor of Architecture, Director of AAD Program*
Dipl. Arch., University of Chile, 1992; M.A., Architectural Association School of Architecture, 1995.

David Wallance *Adjunct Associate Professor of Architecture*
B.Arch., Cooper Union, 1980. Member, A.I.A. Registered architect.

Mark Wasiuta *Adjunct Assistant Professor of Architecture, Director of Exhibitions*

Kevin Wei *Adjunct Assistant Professor of Architecture*
B.Arch., Carnegie Mellon University, 2006; M.S.AUD., Columbia University, 2008; AAR Post-Graduate Research Program, Columbia University, 2009

Marc Weidner *Adjunct Assistant Professor of Real Estate Development*

Norman R. Weiss *Adjunct Associate Professor of Historic Preservation*
B.A., New York University, 1968. Vice president, MCC Materials; senior scientist, Integrated Conservation Resources. Visiting conservation scientist, New York University. Life member, Association for Preservation Technology.

George Wheeler *Adjunct Associate Professor of Historic Preservation; Director of Conservation for the Historic Preservation Program*
B.A. (Art History), Muhlenberg College, 1975; M.A. (Art History), Hunter College; M.S. (Chemistry), New York University, 1982; Ph.D. (Chemistry), 1987. Fellow, American Academy in Rome; fellow, Institutional Institute for Conservation. National Museum Act, 1982, 1983; Getty Conservation Institute Research Contracts, 1988-1994; MMA Travel Grants, 1988, 1991, 1995; Institute for Museum Services, 1988, 1993, 1995; National Endowment for the Arts, 1990, 1995; Getty Conservation Institute Publication Contract, 1995; National Science Foundation, 1996; Rome Prize, 1997; National Center for Preservation Technology and Training, 1998; Samuel Kress Foundation, 1998; Kress Publication Grant, American Institute for Conservation, 2001.

John Christopher Whitelaw *Adjunct Assistant Professor of Architecture*
M.S. in Architecture, Georgia Institute of Technology, 1997; M.Arch., Columbia, 2002.

Dan Wiley *Adjunct Assistant Professor of Urban Design*

Jessica Williams *Adjunct Assistant Professor of Historic Preservation*

Dawanna Williams *Adjunct Assistant Professor of Real Estate Development*

Office of the Dean

Dean of the Graduate School of Architecture, Planning, and Preservation

Mark Wigley

402 Avery; 212-854-3473

The dean is the principal representative of the School to the University, the public, and other institutions. The dean serves as the School's chief executive officer and is immediately responsible for its academic programs, including maintaining a faculty of academic excellence, overseeing its curriculum, its rules and regulations, and insuring a smooth administrative operation. He is also responsible for financial budgeting and development of the School and its centers. He oversees alumni relations.

Associate Dean for Administration

David Hinkle

401 Avery; 212-854-3473

The associate dean coordinates the activities of the Office of the Dean. He maintains all records of the dean's office, as well as those of the faculty of the GSAPP, and handles affirmative action. He is responsible for scheduling all schoolwide meetings and events and handles the assignment of teaching assistantships and readerships. He coordinates all School special events.

Manager, Office of the Dean

Margel Nusbaumer

D401A Avery; 212-854-3473

The manager provides assistance to the dean and the associate dean. She handles the dean's schedule and assists with the scheduling and management of the School's special events and lectures. She has information about these events, about the Columbia Architecture Galleries, and about the faculty of the GSAPP. She oversees the assignment of student assistantships.

Administrative Assistant to the Dean

Matthew Colunga

401 Avery; 212-854-3473

The administrative assistant to the dean provides administrative support to the Dean's Office, screens visitors, and answers general questions about the School. She assists with the School's public events and is responsible for the sale and distribution of the School's publications.

Associate Dean for Admissions, Financial Aid, and Student Affairs

Danielle Smoller

400 Avery; 212-854-3414

The associate dean for admissions, financial aid, and student affairs is responsible for all matters pertaining to admissions, registration, student records, class schedules, and financial aid. Her office handles all questions pertaining to student affairs: loan and work-study applications, course and program requirements, graduation, etc. The associate dean also participates in certain schoolwide committees. She is responsible for the management of all office personnel and is the liaison with the University Human Resources Office regarding grading and salary. She supervises work-study personnel, advises students throughout the year about their academic course requirements, and reviews and authorizes transcripts for graduation.

Student Affairs Officer

400 Avery; 212-854-3414

The student affairs officer assists the associate dean for admissions in all matters pertaining to admissions, financial aid, and student affairs. She is responsible for all student records and course information. Students should go to her with all problems about academic affairs: change of grades, registration problems, housing, course information, etc. The student affairs officer also handles all admissions information.

Student Affairs Coordinator

Emily Col

400 Avery; 212-854-3414

Administrative Assistant, Admissions Office

Meredith Simon-Pearson

400 Avery; 212-854-3414

The administrative assistant handles all admissions mail, keeps track of all applications, enters and updates application information of all applicants and current students into the University's systems through software such as Filemaker and Student Information Systems, and gives instructions and guidance to part-time work-study staff.

Associate Dean of Finance

Janet Reyes

406 Avery; 212-854-3511

The assistant dean of finance handles budget and finance for the School. All academic and administrative appointments are processed in her office. She is responsible for the financial records of the School.

Administrative Coordinators

Yesenia Ozoria; 405 Avery; 212-854-0646

Elizabeth Alicea 405 Avery; 212-854-0625

The administrative coordinators assist the director of finance in all matters pertaining to adjunct faculty and student appointments, record keeping for faculty allocations, hourly payrolls, Kinne-sponsored and other trips, graduation prizes, and processing and

tracking of School spending. Faculty, administrators, and students should go to them for help with purchasing, reimbursements, payments to non-University entities, and payroll issues.

Administrative Assistant, Finance Office

405 Avery; 212-854-3415

The administrative assistant assists the director of finance with the daily work of the Finance Office, including data entry, purchasing, maintaining inventory, and distributing paychecks.

Director of Development

Devon Provan

403 Avery; 212-854-2227

The director of development is responsible for the School's fund-raising opportunities and priorities. She manages a portfolio of major gift prospects and oversees the activities of the School's Office of Development and Alumni Relations.

Alumni Relations Officer

Natasha Marra

403 Avery; 212-854-2843

The alumni relations officer is responsible for the School's relationship with its alumni. She organizes alumni events and manages the School's annual fund campaign.

Administrative Assistant, Office of Development and Alumni Relations

Esther Turay

403 Avery; 212-854-9543

The administrative assistant provides support to the development officer and alumni relations officer of the School. She processes gifts to the School and assists with events planning.

Director, Temple Hoyne Buell Center for the Study of American Architecture

Reinhold Martin

300-level, Buell Hall; 212-854-8165

The director of the Buell Center is responsible for guiding and coordinating programs of symposia, seminars, dissertation fellowships, exhibitions, and fund-raising for the Center as they are developed in conjunction with the dean and the Center's board of advisers.

Program Coordinator, Temple Hoyne Buell Center for the Study of American Architecture

300-level, Buell; 212-854-8165

The program coordinator is responsible for managing all elements of the day-to-day functioning of the Buell Center and supervises all practical aspects of its public and scholarly programs.

Editor, Printed Publications

409 Avery; 212-854-9767

The editor of printed publications is responsible for all aspects of the production of the School's printed publications, including editing, designing, and printing. She works with the dean on the School's strategic plan for publication.

Director of Special Events

Gavin Browning

409 Avery; 212-854-9248

The director of special events manages all of the School's public events sponsored by the Dean's Office and assists with events sponsored by the various program offices and the Development and Alumni Affairs Office. He handles publicity for Schoolwide events and maintains the School's Web site events calendar.

Assistant Director, Historic Preservation and Urban Planning

Trisha Logan

411 Avery; 212-854-3080

The associate director is responsible for the administration of the Historic Preservation and Urban Planning Programs. This includes managing general program matters, recruitment, and administering student theses, internships, and Kinne Travel. She is also the primary contact for prospective students and professional organizations in both fields..

Director of Operations

Mark Taylor

917-526-0703; mt156@columbia.edu

The Director of Operations is responsible for maintaining all spaces occupied by the GSAPP. All renovations of GSAPP spaces are coordinated through this office. The Director of Operations assists the Dean in planning space allocations throughout the School. Additionally, all safety procedures, hours of operation, staff selection and supervision of the School's woodshop are the responsibility of the Director of Operations.

Executive Director of Technology

John Ramahlo

415 Avery

The Executive Director of Technology manages all aspects of information technology at the School, including workstations, servers, desktops, AV, networks, and software. He manages the technical support team, the audiovisual team, and the Output Shop team, and assists the dean in long-range planning.

Lead Systems Coordinator

Benjamin Goldie

206 Fayerweather; 854-8405

The lead systems coordinator is responsible for a range of technical and logistical operations of the School's network, including installation, support, and troubleshooting hardware and software. He assists the systems administrator in the day-to-day management of the technical support team as well as administration of the School's data servers.

Systems Coordinators

Alice Warren, Khaleel Inshanalli, Vann Keo, Leon Chung

206 Fayerweather; 854-4367

415 Avery (Leon); 851-0484

The systems coordinators are responsible for service and support of all desktop hardware and software at the School, assist in maintaining the School's network and in hardware and software installation.

Print Shop Manager

Carlito Bayne

600 Avery; 212-854-2524

The Print Shop manager is responsible for the day-to-day operation of the School's Output Shop, which produces work needed for design studio assignments. He operates the laser cutter and other print shop equipment and assists students as needed with output of drawings, documents, and 3D material. He manages the student assistants/staff of the Output Shop.

Audiovisual Manager

203 Fayerweather; 212-854-8142

The audiovisual manager is responsible for all aspects of the School's audiovisual infrastructure and supervises the setup, maintenance, and scheduling of service for all audiovisual facilities and portable multimedia equipment. He manages the audiovisual aspect of all of the School's public events.

Audiovisual Assistant

Kevin Allen

203 Fayerweather; 854-5595

The audiovisual assistant assists the manager with the daily operations of the School's AV Office. He handles reservations, checkout, and return of equipment, maintains inventory, and assists with the School's public events.

Receptionist

400 Avery; 212-854-3414

The receptionist has information on how best to get in touch with faculty and staff (telephone numbers and addresses of offices and residences, office hours, etc.). The receptionist is also in charge of audiovisual equipment and miscellaneous items such as first-aid materials. Audiovisual equipment must be reserved in advance with the receptionist, who also handles room reservations for reviews, special lectures, etc., and is in charge of locks and keys.

Directors

Aside from general administrative and teaching duties, directors advise the dean on overall policies, program planning, admissions, and pedagogical matters. They are responsible for coordinating and supervising the curriculum for studio or courses, and for monitoring pass/fail procedures in consultation with the faculty. Directors also coordinate with other programs in the School, meet and advise faculty and students, and make recommendations to the dean for the employment of instructional staff. Each director belongs to the Director's Committee.

- | M.Arch. Core Studios: Michael Bell, 400 Avery, 212-854-3414
- | M.Arch. Advanced Studios: Laurie Hawkinson, 212-854-3414
- | M.S. in Advanced Architectural Design: Enrique Walker, 400 Avery, 212-854-5931
- | M.S. in Architecture and Urban Design: Richard Plunz, 414 Avery, 212-854-1816
- | M.S. in Urban Planning: Lance Freeman, 413 Avery, 212-854-3513
- | M.S. in Historic Preservation: Andrew S. Dolkart, 411 Avery, 212-854-3518
- | M.S. in Real Estate Development: Vishaan Chakrabarti, 409 Avery, 212-854-3524
- | New York/Paris Program: Danielle Smoller, 414 Avery, 212-854-9578, Patrick O'Connor (Paris Coordinator)

Sequence Directors (M.Arch. Program)

In addition to teaching, sequence directors are responsible for the organization and coordination of the courses given in their field.

- | History/Theory Sequence Director: Reinhold Martin, 212-854-8165
- | Building Technologies Sequence Director: Craig Schwitter, 212-854-3596
- | Visual Studies Sequence: Director, Laura Kurgan
- |

Administrative Assistants for Programs

Administrative assistants for programs are responsible to their program director(s) and for the daily operations of their program. They oversee the preparation of all course material, official notices, and memoranda, and assist faculty with regard to their classes and course handouts. The administrative assistants also deal with student and faculty inquiries, requests, complaints, etc., and monitor all appointments made by their director(s).

- | Administrative Assistant, Architecture Programs: Stephanie Cha-Ramos, 404A Avery, 212-854-2444
- | Administrative Assistant, Architecture and Urban Design program: David Cohen, 415 Avery, 212-854-1816
- | Administrative Assistant, Historic Preservation and Urban Planning: Leigh Brown, 413A Avery, 212-854-3513
- | Assistant Director, Academic Affairs, Real Estate Development: Jessica Stockton, 409B Avery, 212-854-3524

