College of Architecture Graduate School of Architecture & Urban Design Sam Fox School of Design & Visual Arts Washington University in St. Louis

Architecture Program Report for 2018 NAAB Visit for Continuing Accreditation

Master of Architecture – MArch 3 (Undergraduate degree in or outside of architecture plus 105 graduate credit hours)

Master of Architecture – MArch 2+

(Undergraduate degree in architecture including architectural studies plus 75 graduate credit hours)

Master of Architecture – MArch 2

(Undergraduate degree in architecture plus 60 graduate credit hours)

Year of the Previous Visit: 2012 Current Term of Accreditation:

"At the July 2012 meeting of the National Architectural Accrediting Board (NAAB) the board reviewed the Visiting Team Report (VTR) for the Washington University in St. Louis College of Architecture & Graduate School of Architecture & Urban Design. As a result, the professional architecture program: **Master of Architecture** was formally granted a six-year term of accreditation. The accreditation term is effective January 1, 2012. The program is scheduled for its next accreditation visit in 2018."

Submitted to: The National Architectural Accrediting Board Date: September 7, 2017

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Section 1. Program Description

I.1.1 HISTORY AND MISSION

Washington University in St. Louis

The origins of Washington University date back to 1853, when William Greenleaf Eliot, a Unitarian Minister, with a group of prominent St. Louis citizens, developed the vision of a great institution of higher education west of the Mississippi. In his honor, it was named Eliot Seminary, although it never had a religious affiliation. The name of the institution was changed four years later at the insistence of Mr. Eliot to become the first institution of higher education to bear the name Washington University. Today, Washington University in St. Louis is an independent, nondenominational university of international stature.

The Washington University Danforth campus includes several major teaching units: The College of Arts & Sciences (undergraduate); the Graduate School of Arts & Sciences (graduate); the School of Engineering & Applied Science (undergraduate and graduate); the George Warren Brown School of Social Work (graduate); the School of Law (graduate); the Sam Fox School of Design & Visual Arts (undergraduate and graduate); and the Olin Business School (undergraduate and graduate). The School of Medicine, located on the eastern end of Forest Park adjacent to major hospitals, offers additional graduate and professional degrees.

The emergence of Washington University in St. Louis as a major national university over the past three decades has been the result of carefully designed and implemented plans initiated by former Chancellor William Danforth and accelerated in the last twenty-two years by current Chancellor Mark S. Wrighton. During these decades, certain institutional characteristics have remained constant. Chief among them has been Washington University's commitment to a demonstrably high quality in the nature of its faculty (twenty-four Nobel laureates have been associated with the university), its educational programs and research, and its student body. The university has also continued a commitment to being a comprehensive university, with balanced attention to undergraduate, graduate, and professional study and research. Particular attention has been paid to the interrelationships among its various schools, the maintenance of its moderate size, the development of international programs, and the promotion of diversity.

The current student body is not large (about 6,500 undergraduates and 7,000 graduate and professional students), yet the university's resources and faculty are characteristic of a much larger institution. The diverse student body draws enrollment from all U.S. states and more than 90 countries. *U.S. News and World Report* ranks the university nineteenth in overall undergraduate programs, tenth for entrepreneurs, and second in social work. The overall student to faculty ratio is eight to one, with 80% of students pursuing multiple majors or minors and about one in three students studying abroad. University research priorities include "medical research to translate basic science discoveries into solutions for the world's biggest health problems, environmental and energy research to discover innovations that can reduce greenhouse emissions and slow global warming, innovation and entrepreneurial research to create intellectual property and advance research for the greatest public good, and plant science research conducted in collaboration with the Donald Danforth Plant Science Center to help the world feed its people." The university garnered \$645.6 million in research support in FY2016; more than 3,000 research projects are underway at the university each year.

The university's mission statement reflects its commitment to excellence and diversity across its many programs and among its faculty and students. Approved by the Faculty Senate Council on April 10, 2012, and the Board of Trustees on May 4, 2012, the statement is available in university publications and on the university <u>website</u>.

"Washington University in St. Louis' mission is to discover and disseminate knowledge, and protect the freedom of inquiry through research, teaching and learning. Washington University creates an environment to encourage and support an ethos of wide-ranging exploration.

Washington University's faculty and staff strive to enhance the lives and livelihood of students, the people of the greater St. Louis community, the country and the world.

Our goals are:

- to welcome students, faculty and staff from all backgrounds to create an inclusive community that is welcoming, nurturing and intellectually rigorous;
- to foster excellence in our teaching, research, scholarship and service;
- to prepare students with attitudes, skills and habits of lifelong learning and leadership, thereby enabling them to be productive members of a global society; and
- to be an institution that excels by its accomplishments in our home community, St. Louis, as well as in the nation and the world.

To this end, we intend:

- to judge ourselves by the most exacting standards;
- to attract people of great ability from diverse backgrounds;
- to encourage faculty and students to be bold, independent, and creative thinkers;
- to provide an exemplary, respectful and responsive environment for living, teaching, learning and working for present and future generations; and
- to focus on meaningful measurable results for all of our endeavors."

Sam Fox School of Design & Visual Arts

In July 2006, the Sam Fox School of Design & Visual Arts was established, incorporating the Graduate School of Architecture & Urban Design, the College of Architecture, the Graduate School of Art, the College of Art, and the Mildred Lane Kemper Art Museum. The Sam Fox School builds on the rich histories of its three central units: The School of Art was founded in 1879 as the first professional, university-affiliated art school in the United States. The school is now organized as an undergraduate College and a Graduate School of Art. The School of Architecture was established in 1910, and has the distinction of being one of the eight founding members of the Association of Collegiate Schools of Architecture & Urban Design. The Mildred Lane Kemper Art Museum (formerly the Washington University Gallery of Art) was founded in 1881 as the first art museum west of the Mississippi River.

The initial vision for the Sam Fox School took shape as the Visual Arts & Design Center (1997), subsequently named the Sam Fox Arts Center (2002), which was founded as a hub for interdisciplinary art and design programs. The Sam Fox Arts Center's goals were to provide enhanced opportunities for interdisciplinary study; to encourage the application of emerging information technologies to scholarly and creative work; and to foster the integration of visual literacy as a component in today's liberal arts education for all students. The vision grew to encompass a more expansive collaborative academic endeavor in architecture, design, and art through the launch of a new school at Washington University. In January 2005, Chancellor Mark Wrighton announced the creation of the Sam Fox School of Design & Visual Arts, uniting the academic units of Art and Architecture with the Museum under the leadership of a new dean, Carmon Colangelo.

The improvement, expansion, and construction of new facilities for this collaborative unit have been significant accomplishments. Renovations to Bixby Hall (constructed 1927) and Givens Hall (constructed 1932), home to art and architecture respectively, were completed in 2001, and the Mildred Lane Kemper Art Museum was dedicated in 2006. This modernist building, designed by Pritzker Prize-winning architect and former faculty member Fumihiko Maki, provides a contemporary home to the university's fine collection of art, as well as the Kenneth and Nancy Kranzberg Art & Architecture Library and the Whitaker Learning Lab, a media center that supports the school. Another Maki building dedicated in 2006, Earl E. and Myrtle E. Walker Hall, provides expanded studio space for the College of Art. Steinberg Hall was renovated to house both art and architecture programs. This building, Maki's first commission, was built in 1960 and renovated in 2007. To complete the Sam Fox School campus, current construction will add a new graduate studies building, Weil Hall, and an addition to the Kemper Art Museum. The 82,130-gross-square-foot Weil Hall building will address population increases in the size of graduate architecture, bring graduate art to campus, and provide an interdisciplinary platform for graduate education. The construction is expected to be complete in fall 2019.

The Sam Fox School of Design & Visual Arts is currently in the process of creating a new 10-year strategic plan. The school's first decade brought together art, architecture, and museum into a single entity and initial strategic priorities emphasized opportunities to leverage this new interdisciplinary structure. Major accomplishments included a reimagined undergraduate core curriculum, the introduction of the Master of Landscape Architecture and Doctor of Sustainable Urbanism degrees, the establishment of the Sam Fox School Research Office and the Office for Socially Engaged Practice, the expansion of digital technologies and new media resources, the launch of the Center for Health Research & Design, significant growth of the museum's collection, and the establishment of the Art on Campus public art program. This ten-year period also included substantial fundraising and the development of plans for Weil Hall and the expansion of the Mildred Lane Kemper Art Museum. Looking ahead, the school is planning for the next decade with renewed emphasis on strategic collaborations, opportunities to make impact through innovative research and creative work, continued focus on diversity and citizenship, and emphasis on student success across multiple dimensions. The school plans to finalize and adopt a new strategic plan in late fall 2017 that will once again be aligned with the university planning process as it is being developed.

Architecture at Washington University in St. Louis

Architecture was mentioned in the university catalog as early as 1871, but the Department of Architecture was formally established as part of the School of Engineering and Architecture in 1902. The School of Architecture was established as an independent division of the university in 1910, and in 1912 the school was one of eight founding members of the Association of Collegiate Schools of Architecture (ACSA). Past Deans of Architecture include Joseph Murphy, 1949–1952; Buford Pickens, 1953–1956; Joseph R. Passonneau, 1956–1967; George Anselevicius, 1968–1973; and Constantine Michaelides, 1973–1993 (now Dean Emeritus). In 1993, Chicago architect and professional leader Cynthia Weese, FAIA, herself a graduate of the School of Architecture, succeeded Dean Emeritus Michaelides. Under Dean Weese's leadership, architecture progressed in the graduate curriculum, international program development, and facilities and resource planning. Jerome J. Sincoff, FAIA, past president of Hellmuth, Obata and Kassabaum (HOK), succeeded Cynthia Weese as interim dean in 2005. In November 2006, architect and educator Bruce Lindsev, AIA, began his tenure as Dean of Architecture, Dean Lindsev led the Master of Landscape Architecture initiative, strengthened community design programs, and enhanced environmental education at all levels as the Graduate School grew in size and programming breadth. Following Dean Lindsev's return to the faculty, the dean title was replaced with director to match the program structure in art. Heather Woofter was appointed director in July 2017.

The Graduate School of Architecture & Urban Design is ranked tenth by *DesignIntelligence* (2018). Architecture adheres to high admissions standards in both undergraduate and graduate programs and maintains a student body that is both academically rigorous and demographically diverse. The student body, composed of approximately 180 undergraduates in the Bachelor of Arts and Bachelor of Science curricula and approximately 300 graduate students across the Master of Architecture, Master of Landscape Architecture, and Master of Urban Design programs, is large enough to support an enriching variety of studio and seminar opportunities, but small enough to retain a strong sense of community and a high quality of teaching and learning.

The mission of the Graduate School of Architecture & Urban Design is to educate leaders in architecture, landscape architecture, and urban design who advance design as a creative and innovative practice. The faculty adopted this mission statement on May 19, 2011. This statement represents the faculty's belief in the transformative power of design and its importance for our students' professional futures and the future of our shared physical and cultural environment. The mission underlies the structure of the professional architecture curriculum and supports the fundamental interdisciplinary relationships between the landscape architecture program, the urban design program, and the undergraduate program and its liberal arts foundation.

Reinforcing this mission, the Graduate School of Architecture, in partnership with the AIA St. Louis, offers one of the oldest and most prestigious architecture research fellowships in the United States, <u>The James</u> <u>Harrison Steedman Memorial Fellowship in Architecture</u>. The biannual award, established in 1926, provides \$50,000 to an emerging architect to support six to twelve months of international travel for

architecture research. The award is open to anyone, anywhere in the world, who has received an accredited degree in architecture within the last eight years. Upon completion of the research, fellows are given funding to come to St. Louis to lead a workshop or lecture on their research with students and members of the professional community.

The Graduate School of Architecture & Urban Design contributes to the university mission through its academic offerings, extensive public programming, service to the university and community, and professional engagement. The Graduate School is one of the university's five professional programs that include Engineering, Law, Business, Medicine, and Social Work. Through a free trade agreement, graduate students from across the university can take courses in the Graduate School of Architecture & Urban Design and vice versa. Joint degrees in social work, business, and construction management connect architecture students with fields of study across the university. Dual degrees in architecture/urban design and architecture/landscape architecture expand the opportunities for depth across multiple disciplines. In addition, initial conversations are underway regarding a joint degree in architecture/computer science.

Over the past ten years, architecture faculty have modeled the possibilities of interdisciplinary research within the Sam Fox School and with a wide range of university departments. Projects have included partnerships with Art, the Museum, Engineering, Social Work, Biology, Plant Sciences, Construction Management, and Medicine, as well as the Center for the Humanities; the Gephardt Institute for Civic and Community Engagement; the Skandalaris Center for Entrepreneurial Studies; the International Center for Energy, Environment and Sustainability (formerly the International Center for Advanced Renewable Energy and Sustainability); and the Institute for Public Health. Faculty also serve on leadership committees throughout the university, such as the Steering Committee on Diversity and Inclusion, the Professional and Graduate Student Coordinating Committee, the Fulbright Fellowship Committee, the Faculty Senate, the Provost's Undergraduate Education Committee, and the McDonnell Academy Steering Committee.

The Mildred Lane Kemper Art Museum, the oldest university museum west of the Mississippi River, contributes directly to the university's mission to add to the "store of art." Several museum exhibitions curated by architecture faculty have brought important architectural work and ideas to the university and regional communities. *Drawing Ambience: Alvin Boyarsky and the Architectural Association* (September 12, 2014 – January 4, 2015) was curated by Professor Igor Marjanović and Jan Howard, Curator of Prints, Drawings, and Photographs and Curatorial Chair at the Museum of Art, Rhode Island School of Design. *Drawing Ambience* presented the first public museum exhibition of architectural drawings from the private collection of the noted educator Alvin Boyarsky and included exquisite works by Zaha Hadid, Mary Miss, and Daniel Libeskind, among many others. A public lecture by Dennis Crompton, member of Archigram and visiting faculty, contributed to the show's impact across the university. Also in 2014, Assistant Professor Seng Kuan curated *On the Thresholds of Space-Making: Shinohara Kazuo and His Legacy*, the first U.S. museum exhibition to feature the influential Japanese architect. *Red* (September 20, 2014 – January 6, 2015), curated by Professor of Architecture Stephen Leet, was a Teaching Gallery exhibition exploring the use of the color red in a variety of media, including painting, prints, books, and design objects from the eighteenth century to today.

The architecture program contributes to the physical environment of the university, particularly in the context of capital projects and planning. Director Heather Woofter serves as an ex-officio member and consultant to the Buildings and Grounds Committee of the Board of Trustees succeeding Dean Lindsey who served for the last ten years. This committee reviews and approves all university building and planning projects. Dean Colangelo serves on the East End of Campus academic planning committee and also leads the Art on Campus initiative, which is creating a significant presence for public art at the university and building a world-class collection under the care of the Kemper Art Museum. In addition, faculty routinely use campus spaces as sites for design studios, which contributes to the dialogue regarding campus planning and development.

Architecture faculty contribute to the university's mission through their professional work. A number of faculty maintain active, award-winning design and art practices that contribute to the regional community through built projects, design and planning studies, exhibitions, public art installations, and professional

consultation. With over 35 adjunct faculty, the school benefits directly from a very active local design community and extensive engagement with the regional design and construction industries. The school also acts as a resource to the community and takes seriously its responsibility to participate and contribute beyond campus.

The Graduate School of Architecture & Urban Design benefits directly from the institutional setting of Washington University. The university's commitment to architecture, art, and design education and research is exemplified by the Chancellor's support of the Sam Fox School, its faculty, programs, and facilities. The scale of the university is large enough to provide the support and enrichment that comes from a tier-one research institution, while remaining small enough to nurture individual faculty and student relationships that contribute to an active and productive learning environment. The school shares in the pride of the university as a place dedicated to student and faculty success.

The university is committed to prioritizing research on energy and the environment, including the establishment of the <u>International Center for Energy</u>, <u>Environment and Sustainability</u> (InCEES). As part of this initiative, seven InCEES endowed professors of sustainability hold appointments in programs across the university. Associate Professor Hongxi Yin of the Graduate School of Architecture & Urban Design represents the Graduate School's research initiatives in this capacity. In addition, architecture faculty have been successful in receiving InCEES seed grant funding for research projects.

The <u>McDonnell International Scholars Academy</u>, another notable initiative, draws on a network of esteemed partner universities around the world to bring exceptionally talented graduate and professional students to Washington University. The program affirms our country's interest in attracting talented international students for advanced study and provides a means for the university to learn more about the global community. The McDonnell Academy's mission is to provide its scholars with an extraordinary educational experience, and in doing so, to strengthen its international network of research universities, to develop a cohort of future leaders in a global university system, and to promote global awareness and social responsibility. The Graduate School of Architecture & Urban Design is one of the academic partners in this program.

I.1.2 LEARNING CULTURE

The Graduate School of Architecture & Urban Design encourages a healthy, inclusive work environment that is academically rigorous and socially conscious. The faculty seek to be exemplary leaders in teaching and research while building a participatory community of service to the university, the region, and the world. Faculty seek to promote life-long learning and leadership among students, as well as attentiveness to acute global challenges.

The Master of Architecture program focuses on the critical role of architects in society and culture and on the synthetic activity of design. Fundamental to the graduate curriculum, therefore, is the architectural design studio sequence. This sequence is organized as follows: the first year core -- focusing on the initial steps of design including form-making, space creation, materiality, structure, environment and site conditions as they relate to simple programmatic requisites – followed by a second year core studio in housing. The housing studio addresses issues of culture, urbanity, domesticity, social structures, systems, compactness, planometrics, and materiality.

Beyond core, the students select from a range of vertical studio options organized around projects and topics offered by different design instructors. Each student takes three options studios with a minimum of one of them being a comprehensive studio in preparation of the final Degree Project semester. These studios emphasize the development of strong conceptual abilities, thoughtful integration of technical information, and convincing representations of architectural ideas in two- and three-dimensional form and through a variety of media. Within this option studio sequence, students are free to attend one semester abroad, taking a full load of courses taught by local instructors focusing on the specific social, technical, historic and urbanistic conditions of the region. Two of the three studios abroad follow comprehensive guidelines. The ultimate goal is for each student to develop clear design principles, strong technical resources, and an independent, critical position on the making of architecture in the world.

Also, in the options studio sequence, the school annually offers an interdisciplinary studio, a digital fabrication studio, and studios that address social and environmental issues, often in design-build formats. Students are also permitted to take a landscape architecture or urban design studio to fulfill one of their options studio requirements. The first interdisciplinary studio, offered in 2014, paired a senior architecture faculty member, Stephen Leet, with the former dean of art, Buzz Spector. The studio explored the curatorial prominence of works by Bruno Munari in books, design objects, and paintings, and included a student field trip to Florence. The studio broadened the thinking of architecture students to include intellectual and design influences tangential to the architecture discipline. The second interdisciplinary studio paired Professor of Architecture Sung Ho Kim with Andrew Yoo, a medical researcher who is studying the biology of skin cells and manipulating their properties. Students were charged with the design of a medical research center that used the latest advances in skin and plant filters to consider different forms of enclosure for environmentally sensitive areas. The most recent interdisciplinary studio paired Visiting Assistant Professor Angela Pang with Hiraiwa Yoshiyuki, a structural engineer from the firm Sasaki in Tokyo. Yoshiyuki works with many prominent Japanese architects interested in structural form as an expression of the building. Their studio examined precedents, shared an exhibition of Sasaki works with the school, and created structure-driven projects. The funding for this studio also provided for Yoshiyuki to participate in degree project technical reviews and to provide a lecture on the conceptualization of structures in building design.

In the digital fabrication studio, the school has created partnerships with local institutions to create works with client parameters and reviews, as well as semi-temporary installation venues. The latest collaboration, *Spectroplexus: Structural Substances*, is part of a larger initiative to promote community relationships and build young faculty design practices through projects in the city. Students interface with clients and experience fabrication challenges unique to built works. *Spectroplexus*, a sculptural installation now on view at St. Louis's Lambert International Airport, is part of a series of works that produce hybrid assemblies of analog and digital structures – more information can be found <u>here</u>, and video documentation can be found <u>here</u>. *Spectroplexus* required complex orchestration across a range of processes and technologies: the molds for the subassemblies were fabricated on CNC mills and the flexible carbon fiber wrapped around the molds was baked in industrial powder-coating ovens at TechShop, a makerspace and DIY fabrication studio in the city's growing Cortex innovation district. The pieces were then brought back to campus and cut with knife plotters in the school. This project grew from an architecture collaboration with the Contemporary Art Museum in St. Louis two years prior.

The final semester of the program includes a self-initiated Degree Project – formally our penultimate comprehensive studio – where students synthesize all aspects of architectural design and demonstrate constructability of their projects. These projects typically focus on localized conditions found in the greater St. Louis area in an effort to engage real life situations that define and affect the character of the mid-western city. The independent character of a student's ability is thus demonstrated and tested in this final semester of the curriculum. Informing and enriching the studio experience for students in the Master of Architecture program are courses in architectural history and theory, building technology and structural principles, urban design, professional practice, landscape design and sustainability, and representational and digital media studies. Great emphasis is placed on a student's ability to integrate and synthesize the information in these courses into appropriate architectural form in the design studio. While these topics have consistently been a part of the graduate curriculum, their specific content, sequence, and method of instruction is under constant review and development.

In the area of environmental and social practice, two recent projects include the <u>Solar Decathlon Crete</u> <u>House</u> and <u>Quadrangle Green Rehab</u>. Both projects were carried out in collaboration with the School of Engineering's Construction Management program, as well as the Office of Sustainability and InCEES. Crete House is a model of advanced building technology, demonstrating integrated precast concrete panel systems as an alternate to wood light frame construction. The high performance concrete structure is inherently resilient and promotes energy and cost savings due to the lightness of its thin concrete panels. A large team of students and faculty will travel to Denver, Colorado in fall 2017 to construct Crete House as part of the U.S. Department of Energy Solar Decathlon competition. Green Rehab was an experiment in sustainability and energy consumption involving historic, multi-family residences in urban St. Louis. The project led to practical recommendations to the university's Quadrangle Housing Corporation, which is completing a \$100 million renovation of off-campus residential housing units.

The <u>Office of Socially Engaged Practice</u> opened in 2014 under the directorship of Liz Kramer. The office is a hub and resource to facilitate collaborative, socially engaged practices in art, architecture, and design. Through the support of this office, the school fulfills its institutional responsibility to citizens and communities throughout St. Louis. PXSTL, a signature initiative now coordinated by the office, is a partnership between the Pulitzer Foundation and the Sam Fox School. Together, the organizations cosponsor a competition for emerging architects, artists, and designers to create interventions as meaningful catalysts for urban transformation. In the second installation of PXSTL, the graduate architecture program worked with competition winners architect Amanda Williams and artist Andres Hernandez to develop ideas surrounding their installation *A Way, Away (Listen While I Say)*, a project that unfolded through phases of demolition and construction to regenerate a green space as a gesture of healing a divided city. Students were able to meaningfully engage with the project through a fall 2016 options studio, *Acts of (Un)Building*, taught by Williams, Hernandez, and lecturer Jonathan Stitelman.

Students in the graduate architecture program benefit not only from the wide range of studio opportunities, but also from a low faculty-to-student ratio in studio -- usually 1:12 or less. Desk configurations typically allow for both digital work and model making with an L-shaped configuration in an open floor plan. Reviews during the semester are highly participatory, with the entire body of faculty and students taking part in periodic and mid-reviews. For final reviews, the school has a system in which each studio section is assigned four to six internal reviewers and given the funding to bring in an outside critic; an open invitation for additional local critics to join reviews is extended when appropriate. Reviews are also seen as an opportunity for senior faculty to mentor tenure-track faculty, and review assignments are made accordingly.

The learning culture within the College of Architecture and Graduate School of Architecture & Urban Design is exemplified by the Studio Culture Policy, found <u>here</u>. The most recent version, effective January 1, 2012, was revised in a joint process including both faculty and student leadership groups. Sections in the policy address the following areas: Health and Wellness, Time Management, Critical Discourse and Communication, Integrity, Diversity, Leadership, and Rights and Responsibilities. The studio culture policy is available and accessible to all students, faculty, and staff on the web and paper copies are distributed to all incoming students and discussed at all-school meetings. A related committee, the Learning Culture Committee, was initiated in fall 2016 and is tasked with reviewing policies related to creating a healthy environment at the school for students, faculty, and staff.

The graduate school's policies on academic integrity and expectations on conduct are linked to the professional standards articulated in the AIA's Code of Ethics and Professional Conduct; the code is available to students on the school's website, referenced in the Graduate School's academic integrity policy, and reviewed as part of the required professional practice coursework. Students are also subject to the Washington University community standards laid out in the Washington University Student Code of Conduct. There are numerous resources for graduate students dealing with school-related concerns, including the Sam Fox School Associate Dean of Students, the University Ombuds, the Sam Fox School Academic Integrity Officer, the Habif Health and Wellness Center, and the Office for Student Conduct and Community Standards. Student policies are reviewed annually by faculty and staff; changes to policy occur in curriculum meetings (attended by faculty, staff and student representatives), through student initiative, as well as the maintenance of university standards through the registrar's office.

The school's learning culture is reinforced by a range of extracurricular activities. For example, the school's lecture series is a joint program between art and architecture with interdisciplinary and discipline-specific practitioners, historians, and theoreticians alternating within this structure. Lecturers often participate in reviews during the day and attend a student-organized dinner following the lecture. Recent visitors have included Amale Andraos, dean of Graduate School of Architecture, Planning, and Preservation at Columbia University and co-founder of WORKac; Philippe Rahm, principal of Philippe Rahm architectes; Guy Nordenson, professor of architecture and engineering at Princeton University and founding principal of Guy Nordenson and Associates; and Joanne Kohn, chairman emeritus, Frank Lloyd

Wright House in Ebsworth Park. A current list of visitors for 2017/18 can be found <u>here</u>. In addition to the evening lecture series, the school hosts *Discussions*, a lecture series aimed at provoking advanced conversations on research in architectural history and theory. Current visitors for 2017/18 include Mary McLeod, professor of architecture at Columbia University; Vittoria Di Palma, associate professor of architectural history and theory at the University of Southern California; Daniel M. Abramson, professor of architecture at Delft University of Technology and head of the JAAP Bakema Study Centre in Rotterdam. In 2014, the school sponsored a symposium titled *Women in Architecture* responding to a seminal 1974 conference of the same name organized by Washington University students. Prominent architects in practice and academia were invited to address contemporary issues in the field; the symposium also drew from talent in the university to host workshops on topics such as negotiation, managing work-life balance, and mentorship. This symposium subsequently generated elective coursework on the topic of women in architecture through the advocacy of students in the Graduate Architecture Council (GAC) and undergraduate Architecture Student Council (ASC) organizations.

The school organizes topical sessions for entering graduate students on campus safety, academic integrity, sexual harassment, and maintaining a healthy work ethic. Specialists from the police department, the writing center, the Title IX office, and student mental health services orient students with data, code standards, and resources to ensure a healthy environment for all. The full array of these special discussions began in fall 2015 in an all-school meeting and has continued each year with incoming students during orientation. Faculty within the program discuss and review the principles of these presentations to reinforce their importance with incoming students. For academic integrity assistance, *Writing with Sources* by Gordon Harvey is given to all incoming students outlining proper citation methodologies. Student teaching assistants attend a university-led workshop on standards of conduct and best practices working with peers in a teaching, leadership, and/or supervisory role.

For our international students, we provide a cultural adaptation workshop as well as language fluency courses upon early August arrival and during their first semester of research and writing coursework. Additional support occurs as needed through the writing center, freely accessible for all university students on an appointment basis or with faculty recommendation for course-specific assistance. In the spirit of community building, the Graduate Architecture Council (GAC) has initiated a number of social events to bring together students across cultures and now includes an International Student Representative on the GAC board to specifically provide oversight to the needs of non-US students.

The learning culture in the school is assessed through a number of channels, including the Architecture Curriculum Committee, chairs' meetings, the Sam Fox School Faculty Council (intended to address issues arising through faculty concerns and initiatives), and a series of committees addressing specific areas of the curriculum including history/theory, building technology, digital technology, and learning culture. In addition, a robust review system contributes faculty and outside expertise in evaluating and growing the programs.

While the school's learning culture encourages faculty to model leadership and mentorship to students, faculty also benefit from opportunities to develop leadership skills and grow networks through school- and university-sponsored offerings. Mentorship is an ongoing part of the tenure and promotion process and all tenure-track faculty are assigned a mentor in their discipline to support progression toward tenure, to give guidance on research and creative activity, and to help develop teaching expertise. The Office of the Provost sponsors cross-school initiatives for women and emerging faculty leaders such as Faculty Leadership Workshops and WFLI, the Women Faculty Leadership Institute, which is in its second round of year-long programming activities. Faculty may also choose to join the Association of Women Faculty for additional networking and mentorship opportunities.

I.1.3 SOCIAL EQUITY

Washington University is the third largest economic engine in the city of St. Louis; its prominent position in the community provides a platform to lead by example and model <u>best practices</u> in citizenship and diversity. The intense focus on St. Louis in 2014 following the events in Ferguson, Missouri, was an

important opportunity for the university to recommit to become more diverse, inclusive, and welcoming; the university also made a commitment to become a thought leader nationally for diversity practices in academic communities. In 2015, Chancellor Wrighton and Provost Thorp convened a Steering Committee on Diversity & Inclusion to ensure that progress continued to be made in this area. Associate Professor of Architecture Bob Hansman represented the Sam Fox School on this board, which was charged with creating a university-wide plan for diversity. The <u>Report of the Steering Committee</u> laid out a 2-year, 12-point plan and established a Diversity Commission to implement the plan. Former Dean Bruce Lindsey represents the Sam Fox School on the Commission. In addition, a wide range of Sam Fox School faculty and staff served on working groups convened by the Commission in 2016 and 2017 to delve into specific diversity topics around graduate and professional students, undergraduate students, staff, faculty, race and identity, and strategic planning. Recommendations from each of these working groups has been forwarded to the Commission for review and compilation.

As the university continues to work toward the points in its diversity plan, a number of other steps have been taken to build an inclusive community. In 2013, the Mosaic Project sought to facilitate dialogue around issues of diversity and its work generated the <u>Center for Diversity and Inclusion</u> -- a resource for the entire campus community in the areas of advocacy, support, collaboration, and outreach -- and the Bias Report and Support System. The university has continued to build an enormous array of resources and initiatives around diversity and has identified a framework focused on four primary pillars: confronting bias, charting progress through the tracking and dissemination of data, investing in foundational policies and strategic plans to increase diversity, and working toward a broadly accessible campus for all individuals. University initiatives are captured on its Diversity and Inclusion <u>website</u>.

Within this context of the university, the Sam Fox School of Design & Visual Arts also strives to promote good citizenship, understanding the benefits that are derived from a diverse and inclusive community. A high priority for the school, identified by Dean Carmon Colangelo, is to increase the underrepresented student population with augmented student financial aid and broader recruiting strategies. The school is supported in this work with funding from the Provost's office. The school also strives to diversify our international student body to represent a wider range of nationalities and cultures.

A Sam Fox School faculty and staff committee for Diversity and Fairness studies messaging, resources, policy, and culture across the school and is currently in the process of drafting a Sam Fox School diversity plan to respond to the larger university diversity efforts. Dean Colangelo has instituted diversity training for faculty, staff, and student groups into annual programming. In addition, we continue to be proactive in seeking URM candidates in faculty recruitment. The Office of the Provost, through Vice Provost Adrienne Davis's leadership, provides special training to all faculty search chairs on best practices for recruiting and hiring that encourages assembling a strong pool of diverse candidates. Funding from the Provost is available specifically to recruit and retain women and diverse faculty.

On an academic level, co-principal investigators former dean Bruce Lindsey (Architecture) and Professor Jean Allman (Arts & Sciences) received a Mellon Foundation Grant entitled The Divided City: An Urban Humanities Initiative. The grant partner scholars in the humanities with designers, architects, urban designers, landscape architects, legal scholars, sociologists, geographers, GIS cartographers, and others to consider issues of segregation. Content examines issues related to divided cities as a theoretical framework in order to explore relationships between urban forms and social change. The generous four-year grant supports faculty and curriculum development, archiving segregation in St. Louis, and outreach for the school and community. Long-term outcomes are listed on the project website, found <u>here</u>.

Washington University is committed to a positive learning and working environment for its students, faculty, and staff. University policy prohibits discrimination based on race, color, age, religion, gender, sexual orientation, or genetic information. The Graduate School of Architecture & Urban Design upholds and maintains these fundamental commitments. These university policies are available to Graduate School faculty, staff, and students on the university's <u>website</u>.

All members of the Washington University community are expected to abide by the <u>Code of Conduct</u> maintained by the Office of University Compliance. Faculty, staff and students are also governed by Washington University's policies and procedures related to discrimination, harassment, and student

health. These policies and procedures for grievances are published on the university's website, <u>Bulletin</u>, and links are provided on the Sam Fox School website. For the university's policies on discrimination, harassment, and student health, please click <u>here</u>.

The university provides strong support and resources for students with mobility and learning disabilities through <u>Cornerstone: The Learning Center</u>. These resources include academic support through advising, mentorship, and individualized learning plans; disability resources and accommodations; and TRiO, a federally-funded program that offers support to low-income students, the first in their family to go to college, or students with a documented disability.

I.1.4 DEFINING PERSPECTIVES

A. Collaboration and Leadership: The Graduate School of Architecture & Urban Design is committed to leadership in sustainable design, social equity, and the understanding of diverse cultures. The Graduate School has long held a reputation for educating students who are effective in practice directly upon graduation. This is reflected in a curriculum that uses design as a synthetic and creative activity, allowing technology, history, theory, context, and culture to be generative. Graduating students' effectiveness in practice is a result, in large part, of the studio sequence. At the same time, the Graduate School seeks to support the development of its students' individual identities as designers and future leaders. This is reflected in a curriculum that features flexibility: a required core is followed by an individually customized sequence of options studios and electives, culminating in a capstone final degree project with comprehensive development and innovation in a student-driven area of focus. In Degree Project, project sites are in the St. Louis region, encouraging students to think locally as well as globally. As a Midwestern city, St. Louis embodies many of the challenges found throughout the country – social inequity and unrest, natural and man-made environmental challenges, and the effects of shrinking cities both within the urban core and in outlying counties. The degree project semester launches students into the professional world, suggesting the creative interests of their future pursuits in the field.

International programs provide opportunities for an essential global perspective. These programs operate as a part of the school's professional practice coursework, exposing students to architects and their practices around the world. They also operate as part of architecture students' urban design education through semester-long study in different regions of the world, including classes in South America, Africa, Europe, and Asia. All international programs have a required urban issues course. The variety of faculty, both in residence and visiting, and the diversity of theoretical approaches, sites, and programs, encourage students to explore and test their architectural identities.

The Graduate School actively promotes internships and professional experiences for students as part of its holistic approach to education and collaborative learning. The Design Internship Network (DIN), a partnership of firms and organizations committed to providing internships to Washington University architecture students, is aimed at increasing these professional opportunities. Architecture students may petition to take a one-year leave of absence without extenuating circumstances in order to pursue internships prior to graduation. In addition, students benefit from the large number of practicing professionals who teach courses and studios as adjuncts, professors of practice, and tenured faculty members with active engagement in design practice. This brings the profession to the Graduate School through a variety of opportunities. And by exploring innovative teaching methods and advanced forms of research, the faculty are able to expand the knowledge base that enforces architectural work across multiple realms within the field. Students participate in research assistantships with their faculty, as well as collaborative projects such as the Solar Decathlon, the Lambert International Airport partnership, CityStudioSTL, PXSTL, and University City Public Art, among others.

In addition to curricular and internship opportunities, students have leadership opportunities through organizations such as the Graduate Architecture Council (GAC), National Organization of Minority Architects (NOMAS) student chapter, and Women in Architecture and Design (WIAD). The WIAD student organization formed after students played a prominent role in planning and hosting the 2014 symposium *Women in Architecture*.

The school prioritizes collaboration and leadership opportunities as defined in the long term planning by emphasizing community growth in local and global citizenship, by prioritizing efforts to create a more diverse and supportive environment, and by emphasizing excellence in teaching, advising and the career development of members of the Sam Fox School community. The long range planning recognizes the importance of nurturing the next generation of leaders to reach these goals.

B. Design: The architecture program benefits from design faculty with diverse interests and approaches to design research and practice.

Design Practice: The core is a three-semester sequence. The first year introduces conceptual foundations of design as well as a range of making skills that shape sensibility to materiality and spatial thinking. The context moves from landscape to urban situations with the purpose of establishing intuitive responses to varying environments and to encourage strategic thinking related to passive design parameters. Students make models, construct two- and three-dimensional drawings by hand, and work on the computer with a variety of software to encourage sophistication in investigative design. The third semester of core focuses on housing – one of the biggest challenges facing architects globally today. Students consider complex influences including culture, domesticity, the city, infrastructure, and the economic and political factors that come together as a collective expression. The last required studio is degree project, culminating in a self-directed design project that includes site response, building system strategy, and environmental strategies as well as a conceptual and theoretical design approach.

History/Theory: An underlying premise of the design curriculum is that, as students conceptualize their studio work, they benefit from a historically informed understanding of architecture and urbanism. History coursework emphasizes the formal, theoretical, social, technical, and economic background of design works presented and discussed in required courses and seminars. Students read, write papers, make inclass presentations, and visit sites to develop their ability to think clearly about the history of the built environment in its many contexts -- from local to global. Students learn to formulate clear research topics and to support their conclusions by gathering, recording, and assessing documentary evidence. Students become informed about library, archival, and online resources for historical research; they are also required to work both individually and collaboratively and to report to others about their findings.

Students enroll in seminars and studios simultaneously to establish depth in technical knowledge that contributes to holistic design thinking. Seminar topics include history/theory, environmental systems, building systems, energy efficiency, and urban issues. The Graduate School benefits from its multiple degree programs, providing architecture students with the opportunity to take courses and options studios in landscape architecture or urban design. Likewise, landscape architecture students are able to take architecture or urban design studios and required or elective courses in architecture. Half of the current urban design students are part of the dual degree program with architecture. Moving through the core architecture curriculum before entering the urban design program, these students bring strong design experience to their studies. An important tenet among faculty is the value of discipline-specific knowledge applied to interdisciplinary work.

Design is a core value in the graduate architecture curriculum and a tenet of the Sam Fox School. Long range planning recognizes this by prioritizing innovative forms of creative research and continuing to invest in rigorous academic programs that engage local and global communities. While striving to take on interdisciplinary challenges in the years ahead, the Sam Fox School recognizes that this type of work relies on disciplinary strength and a student body that values creativity and research.

C. Professional Opportunity: Students have an architecture-dedicated career center that assists in bridging design development to practice and connecting them to a large global network. Yearly activities include a firm job fair and firm road shows in cities throughout the country, as well as one-on-one career advising. In addition, students may take up to a one-year leave of absence from the program for internships. The school qualifies as a STEM classified program -- allowing international students significant practice experience within and following their education. The school has a dedicated Architect Licensing Advisor to assist students in best practices on the path towards licensure. The school's professional practice course explores alternative roles for architects in the building industry; in addition, seminars and studios are offered highlighting roles that complement an architecture degree. For instance,

the recent Solar Decathlon project leveraged the construction management skills of student team leaders Dylan Callahan and Ethan Miller. Both students are working towards a joint degree in architecture and construction management.

The Graduate School of Architecture maintains a reputation of preparing students for practice through a progressive curriculum leading to Degree Project. Long range planning further supports the creation of bridges to the profession by ensuring that students, faculty and staff are given opportunities to grow their local and global citizenship.

D. Stewardship of the Environment: The school moved its introductory environmental systems course to the first year to be offered in conjunction with the second semester design studio. The intention was to instill passive design as intuitive and informed studies in form, siting, and building design logic. The second environmental systems course covers the systems that govern sustainable practice. In addition to the two required courses, all studios emphasize the importance of environmental priorities. Many focus primarily on issues of sustainability, such as Associate Professor Gia Daskalakis's recent studio on hidden urban rivers and the Solar Decathlon Crete House studios. The school also offers seminars and special project opportunities that explore matters such as the economics of sustainability and resilient design principles. Students have opportunities to work with campus departments focused on environmental success such as the Office of Sustainability and Campus Facilities. Students will also be engaged with the construction of Weil Hall, currently planned as a LEED Gold building.

Stewardship of the environment is a key priority of all programs at Washington University. The heading 'Energy, Environment and Sustainability' is listed among the five strategic priorities, and this includes a commitment to reduce the school's environmental impact, while also developing new research for a more sustainable future. Many resources are provided by the school to promote work in this critical area.

E. Community and Social Responsibility: Washington University is deeply committed to local issues and our responsibility to the community of St. Louis. The city, which struggles in many neighborhoods with a legacy of racial segregation, vacancy, and a lack of access to resources, is emblematic of the divides that exist throughout our country. In the context of the city, our students experience firsthand the importance of social responsibility. Associate Professor Bob Hansman, a faculty member in the architecture school who is now also a part of the Gephardt Institute for Civic and Community Engagement, has a long-standing history of being an activist and leader within the university to instigate change and awareness. The school's Office of Socially Engaged Practice builds on long-standing efforts in architecture to create work in the community. The addition of this resource has allowed architecture to more effectively partner with community organizations and support seminars and studios with objectives to enact work in this domain. Details of the scope of these projects can be found here. Through this office, a series of "Blue Pages," guides has been produced to encourage best practices for working with individuals, communities, and organizations on socially engaged projects. These guides are used to assist faculty and students with budgeting, establishing and conducting relationships with community partners, and working with minors, among other topics. In addition to Sam Fox School support. the office's director, Liz Kramer, attends conferences and assists other schools with community partnerships. She is also instrumental in conducting self-assessment procedures and soliciting feedback from community partners.

Community and social responsibility is critical to the future success of the university and the Sam Fox School. The graduate architecture curriculum and long range planning emphasizes citizenship, the creation of supportive environments, facilitating discipline impact in local communities, and inspiring future community leaders within our student body. The city of St. Louis faces evolving social challenges ahead, and the university views its role to include the thoughtful stewardship of values, strengthening the positive impact of academic capital.

I.1.5 LONG RANGE PLANNING

Long ranging planning for the College of Architecture and Graduate School of Architecture & Urban Design is undertaken in concert with similar efforts for the College and Graduate School of Art and the

Mildred Lane Kemper Art Museum. This work informs long range planning for the Sam Fox School, led by Dean Carmon Colangelo, with substantial input from the school's National Council. Dean Colangelo represents the school's planning efforts at the university level as a member of the University Council, which facilitates ongoing discussions of university-wide planning, assessment, and prioritization of strategic initiatives. Director Heather Woofter and the Chair of Graduate Architecture, currently Interim Chair of Graduate Architecture Adrian Luchini, lead ongoing long range planning efforts for the Graduate School of Architecture.

Additionally, the school has several methodologies to capture information and access long range planning needs. We instigate student surveys through the Graduate Architecture Council and other ad hoc student committees, review student evaluations and exit surveys, and consider suggestions provided through student advocates. Our core coordinators review student performance with the chair and we hold extensive reviews concluding each semester.

As mentioned in Section I.1.1, the Sam Fox School of Design & Visual Arts is currently in the process of creating a new 10-year strategic plan to build on the school's first decade of accomplishment. To lay the groundwork for the new plan, the Dean's Office gathered specific input from key stakeholder groups: Sam Fox School National Council, faculty, students, and staff. The input from these groups was captured in an outline that was deepened and refined by a faculty and curator working group and the school's chairs and directors. Broad goals identified in the plan include the following:

- Support innovative modes of research, scholarship, and creative practice that are at the forefront of our disciplines.
- Invest in rigorous academic programs that distinguish the Sam Fox School nationally and internationally.
- Provide all students, faculty, and staff the opportunity to demonstrate and grow their local and global citizenship.
- Become a more diverse, inclusive, accessible, and supportive community.
- Nurture the next generation of leaders in our fields through excellence in teaching, advising, and career development.
- Build reputation nationally and internationally.

The Office of the Dean is working to present a final draft of the new strategic plan to the faculty by November 2017. Once the new plan is adopted, it is a goal of the Graduate School of Architecture & Urban Design to use the plan as a guidepost and a benchmark for the setting of new objectives and priorities as Director Heather Woofter begins her tenure.

I.1.6 ASSESSMENT

I.1.6.A PROGRAM SELF-ASSESSMENT

The Graduate School of Architecture & Urban Design benefits from a continuous and ongoing process of self-assessment that includes university, Sam Fox School, and Graduate School efforts. Objectives identified through long-range and on-going planning processes set the context for this assessment. Progress in meeting objectives is discussed at both the Sam Fox School level and the program level through cabinet meetings, faculty meetings, and discussions among faculty, deans, chairs, and coordinators. The Dean of the Sam Fox School provides formal reports on progress of the programs to the Chancellor, Provost, and the National Council. The Dean of the Sam Fox School and the director, as well as faculty and program chairs, travel frequently to meet with alumni to better understand the national and global context of architecture education and practice and to hear first-hand alumni perspectives on the education they received from the school and the students they are employing from our program. In addition, the program uses the following assessment tools:

Annual Professional Activities Reports: An annual report outlining teaching, service, and research/creative activity is required of all faculty and submitted to the Director of Architecture at the beginning of the following academic year. The report is used by the director to write yearly faculty

evaluation letters. The Director of Architecture meets individually with faculty as a follow up to the evaluation letter and to discuss teaching assignments and research priorities for the coming year.

National Council: The National Council is an advisory board to the Sam Fox School consisting of alumni, distinguished practitioners, and friends of the school. A Council Chair presides over the group, which consists of sub-councils representing Architecture, Art, and the Museum, each with their own sub-chair who works in cooperation with the respective director. The Council meets twice each year to discuss strategic directions, initiatives, and to provide feedback and assessment of progress and priorities.

Accreditation and National Discourse: Annual reports and national forums related to accreditation form a basis for discussion and evaluation within the graduate program. Faculty and staff have served as members of accreditation teams providing valuable insights into general issues of architectural education and accreditation.

Visiting Faculty: Visiting faculty provide a continuous source of feedback and evaluation relative to other programs, disciplinary trajectories, and professional demands. In the past two years, the Graduate School has averaged three visiting faculty per semester. These faculty represent diverse practices and creative experience and provide a broad range of feedback on programs, courses, and student achievement. Faculty who teach in the international programs are routinely invited to attend reviews at the Graduate School and provide an international perspective on programs in St. Louis while contributing to their understanding of standards and expectations.

Final Reviews: Each studio is provided financial and coordination support to invite an outside critic to the school for final reviews. This program is robust, resulting in a schedule of external and internal faculty critics, as well as local architects, who participate in a biannual evaluation of our programs. The school always welcomes written feedback about program strengths and areas for improvement from critics.

Student Course Evaluations: Course evaluations are submitted each semester for all courses in the Graduate School. Evaluations are available to faculty and to the director for review. Course evaluation results are used in yearly faculty evaluations as well as tenure and promotion reviews.

Student Leader Lunches: The Director of Architecture and program leaders meet monthly with undergraduate and graduate student leaders to facilitate communication, discuss initiatives, and work to address problems and concerns.

Year-End Exhibition: Students organize year-end exhibitions of work by graduating undergraduate and graduate students that reveal a comprehensive cross-section of course activity. The exhibitions provide context for faculty discussion and casual evaluation that informs more structured processes of evaluation and strategic planning.

Chair's Meetings: The director conducts monthly meetings with the program chairs to identify both shortterm and long-term goals for the programs. The program chairs work with their faculty to create ad hoc committees or to create proposals to take to the curriculum committee. The chair's meetings are also used to facilitate the course planning process, identify hiring needs, establishing recruiting initiatives and strategies, and to identify strengths, challenges, trends, and opportunities in the academic and research environment related to the defining perspectives and mission of the school.

Career Services: The career services team conducts surveys of our current students and alumni. The team uses these results to understand where our students are being employed and to identify trends.

The Graduate School is committed to an experience that allows students to be effective in the profession from the time of graduation. Feedback from self-assessment tools is used to identify strengths and weaknesses as well as to establish strategic goals and initiatives to further develop our program to this end. The architecture program's self-assessment methods impact the long range planning by providing a valuable feedback loop measuring progress. In advancing a diverse range of assessment tools, the school more nimbly identifies and addresses emerging concerns in the profession and across academic programs. As we look towards future initiatives (such as development of research at the forefront of our discipline), these self-assessment tools play a critical role in guiding priorities, identifying strengths and areas of concern.

I.1.6.B CURRICULAR ASSESSMENT AND DEVELOPMENT

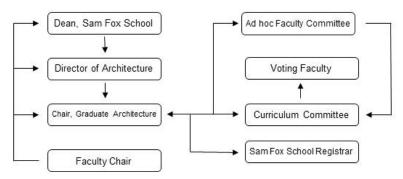
The Graduate School is committed to consistently improving our programs through curricular assessment and development. In the core studios, faculty review particular areas of study on rotation, proposing alternative curricula and evaluating the effectiveness of recent initiatives. Faculty review these programs in small groups and also as a larger faculty base as we connect our core studios to our degree project semester. We also have established committees to review curriculum in specific areas: building technology, digital technology, and history/theory. These focus groups review curriculum, NAAB student performance criteria, and also make recommendations for new courses.

Each semester, required courses such as the Graduate Core Studios, Architectural Representation courses, Design Thinking, and Degree Project have coordinators that oversee the faculty and overall coordination of the course across multiple sections. These coordinators are essential in identifying new objectives for learning and proposing solutions to make the studios run more efficiently and effectively for future evolutions. For example, the third semester core studio, 419, just recently went through a learning objective review to make the studio more robust and pertinent to today's housing issues. The faculty rethought the studio structure in order to study comparative conditions and produce conversations between faculty and students alike. It is a hybrid between core and options studios where the faculty rotate in the beginning of the semester, preferring to teach jointly and then retain a cohort of students to investigate a specific location. In this way, the project is collaborative in the shaping of issues and conversations around pedagogy and the creation of a framework to allow faculty to maneuver and give definition to their specific project. The curriculum development process included roundtable discussions and working dinners to review objectives and student performance criteria and evaluation.

The school does not rely on this process alone for assessment. Issues can also be brought directly from the faculty to the program chair through the Faculty Chair, reviewed by an ad hoc committee or faculty in the area of study, and then reviewed by the curriculum committee. The Curriculum Committee oversees all curriculum issues within the College of Architecture and the Graduate School of Architecture & Urban Design. The Curriculum Committee is made up of full-time tenured and tenure-track faculty members appointed by the Director of Architecture as well as student representatives. The committee includes registered architects and senior faculty member's familiar with the NAAB *Conditions for Accreditation*. In addition to the representative faculty members appointed by the director, the committee includes the chairs of programs in architecture, urban design, and landscape architecture. The director appoints the chair of Curriculum Committee on a yearly basis.

The committee meets four to six times a semester and establishes its agenda and schedule at the outset of each semester. The agenda is determined by a consensus of the committee in consultation with the faculty and is based on an ongoing review of the school's curriculum and current issues in professional practice. Any faculty member is welcome to put forth an issue for consideration by the committee. The final agenda for each semester is forwarded to the faculty and all faculty are invited to participate in committee meetings. If the Curriculum Committee supports a curricula change by a majority vote, the proposal is then brought to the faculty as a whole. Proposals are put forth for a reading for consideration and discussion and a vote at the faculty meeting. All curriculum changes related to either structure or content must be approved by a majority vote of the faculty.

Curriculum Development Structure



Section 2. Progress Since the Previous Visit

PROGRAM RESPONSE TO CONDITIONS NOT MET – VISITING TEAM REPORT (2012)

A. 10. Cultural Diversity

Visiting Team Report (2012): The course work lacks content on diversity in these categories: values, behavior, societal roles and abilities. The AR 419 Design III (Housing Studio) positioned diversity through formal architectural constructs such as clustering and collective strategies, and not on the human side, such as demographics, race and socioeconomic viewpoints. The AR 512 Design IV International Studios traveled to many locations abroad, but it was not evident in the work that the students interacted with communities and culture from those regions. History is even a more difficult subject in a growing global economy and practice. The core history sequence AR 4283 and AR 4284 offers a superb Western and European review; however, only 5 weeks out of 36 weeks are dedicated to content on Asia and non-Western and non-Christian subject matter.

Program Activities in Response [Year of previous visit (2012) – Year of APR (2017)]:

The student performance criteria were re-evaluated and A.8 Cultural Diversity and Social Equity is met in a combination of courses that include:

- A46 ARCH 419 Architectural Design III
- A46 ARCH 4284 Architectural History II
- A46 ARCH 616 Degree Project

The multi-family house in A46 ARCH 419 Architectural Design III addresses the importance of housing in a global dimension. Faculties engage different sites from around the world, with visiting and local faculty working in places of their cultural backgrounds. The studio engages more complex and diverse criteria, including the cultural and social dimensions of building form. Students are exposed to the diverse needs, values, behavior norms, physical abilities, social, and spatial patterns. Through the design exercise, students have the responsibility to ensure equity of access to sites, buildings, and structures.

The A46 ARCH 4284 Architectural History II course is a survey of the history and theory of architecture and urbanism from the nineteenth century to the present. The course emphasizes the understanding of the formal, theoretical, social, technical and economic background of the work presented and discussed.

The A46 ARCH 616 Degree Project course is the final design studio for each student. The student spends a semester prior to the studio in the A46 ARCH 580 Design Thinking course creating a publication that is a record of research, analysis, and speculation that serves as the foundation to the Degree Project studio. As a capstone to each student's program, the projects incorporate many principles and values to include cultural diversity and social equity.

The Office of Socially Engaged Practice also address concerns related to cultural diversity and social equity. Sam Fox School faculty, staff and students work with individuals, organizations, governments, and communities to take on social, environmental and economic challenges through research, teaching, and practice. Courses in socially engaged practice are <u>here</u>.

B. 2. Accessibility

Visiting Team Report (2012): There is a clear directive to incorporate accessibility requirements in course syllabi, but little evidence of ability was found in the design project coursework of AR 419. No evidence was found in AR 438. Evidence of understanding was found in AR 346 coursework exams.

Program Activities in Response [Year of previous visit (2012) - Year of APR (2017)]:

Accessibility and Life Safety are now a part of B.3 Codes and Regulations. Evidence of this criterion can be found in A46 ARCH 646 Professional Practice and A46 ARCH 616 Degree Project.

A46 ARCH 646 Professional Practice covers life safety, building codes, regulations and zoning ordinances on an informational level. Examples of topics covered include:

- Purpose of building codes and regulations,
- Responsibility for life safety,
- International Building Code,
- Application of ADA requirements,
- Purpose and application of zoning ordinances, and
- Optional visit to zoning or appeals hearing.

A46 ARCH 616 Degree Project incorporates these topics and students are expected to incorporate them in to their design projects.

B. 7. Financial Considerations

Visiting Team Report (2012): AR 646: Professional Practice introduces subjects such as contracts, cost estimating and schedules, but does not cover the fiscal responsibility of the architect in relation to projects. Pre-design activities, building budgets, construction fiscal management, and post construction economic performance are not covered. A few option studios and electives engage students briefly in fiscal concerns. Overall, no definite evidence was found to ascertain a level of understanding was achieved by every student in the program. In the team's meeting with the students, some expressed eagerness and concern to understand the roles architects play in bringing projects and initiatives to fruition in future economic climates.

Program Activities in Response [Year of previous visit (2012) – Year of APR (2017)]:

B.10 Financial Considerations is covered by a combination of A46 ARCH 439 Environmental Systems II and A46 ARCH 646 Professional Practice. Environmental Systems II covers operational costs and this is incorporated in student projects. Additionally, Professional Practice covers the fundamentals of building costs. As explained through the architectural process, the course also covers project financing, project feasibility, construction cost estimating, construction scheduling and operational costs.

C. 8. Ethics and Professional Judgment

Visiting Team Report (2012): Evidence was not found in AR 646 Professional Practice that supports an understanding of Ethics and Professional Judgment.

It is clearly stated on page two of the AR 646 syllabus (under 'the Ethical Base') that ethics and codes of professional behavior are addressed in an open discussion format. The lack of documentation for the discussions does not allow for a holistic assessment of the degree of student comprehension and performance of the issues associated with ethics and professional judgment. There is secondary evidence found in exams and an arbitration exercise that addresses aspects of the subject matter, but in a more fragmentary way.

Program Activities in Response [Year of previous visit (2012) – Year of APR (2017)]:

C.8 Ethics and Professional Judgment was changed to D.5 Professional Conduct. In A46 ARCH 646 Professional Practice, both ethics and codes of professional behavior, which underlie the performance of the activities in architectural practice and business, are introduced. Although these topics are still addressed in an open discussion format, assignments and exams have incorporated the material more holistically.

C. 9. Community and Social Responsibility

Visiting Team Report (2012): The criterion is listed in the syllabi of AR 419 Housing Studio and the option studios AR 511, AR 512, and AR 611. Evidence was not found indicating that all students are required to demonstrate understanding. Demonstration of understanding is uneven, particularly regarding historic resources. Yet, it is clear that the program is committed to community involvement and

encourages students to be socially responsible. This is shown in a number of projects such as the designbuild studios, the Home Studio, the pavilion for Tower Grove studio, the New Orleans studio, the San Diego/Tijuana studio, as well as a number of student-led competitions.

Program Activities in Response [Year of previous visit (2012) – Year of APR (2017)]:

C.9 Community and Social Responsibility has been eliminated from the student performance criteria. Please reference I.1.4 Defining Perspectives for information about Community and Social Responsibility as a defining perspective.

PROGRAM RESPONSE TO CAUSES OF CONCERN – VISITING TEAM REPORT (2012)

I.2.2 Administrative Structure & Governance

Visiting Team Report (2012): Administrative Structure: The Sam Fox School of Design and Visual Arts was created out of the association of the former schools of Architecture and Arts along with expanded programs including the Kemper Art Museum and supporting facilities. A new and equally expanded organizational structure was introduced to meet the new demands of this institution and diverse offerings, now in its 6th year of operations. The administrative structure maintained many of the positions that existed in the original components, and new positions were introduced. The team understands this is an evolving structure, and that it is under review. However, there is a concern that the organizational structure and lines of communication are not clear and transparent. The roles and responsibilities within the SF School and the needs of the professional units are not fully defined or delineated. Priorities for funding and space allocation are both impacted by this lack of clarity. This confusion is both at the student and faculty levels.

Governance: The visiting team has a concern about a shared perception among some faculty and students that the College and Graduate School of Architecture does not have a purposeful autonomy in administration and governance of their own programs and budgetary matters, and that there is some disparity between architecture and art in matters of facilities and fiscal allocations. The school has a unique opportunity to offer programs and curriculum that are not available to most architecture programs. The team recognizes the potential of the Sam Fox School and the extraordinary resources available to faculty, students, the university, and the community. It is imperative that differences and misperceptions regarding administrative structure and governance be resolved to ensure the high goals the program has established for itself are met.

Program Activities in Response [Year of previous visit (2012) – Year of APR (2017)]:

In 2012, a process was initiated to respond to the above concerns about the administrative structure, to provide clarity in reporting lines, to give greater representation to each academic program area, and to encourage greater interdisciplinary collaboration. It was determined that the titles "Dean of Art" and "Dean of Architecture," which had originated when the schools were separate entities, would transition upon subsequent appointments to "Director." Directors are appointed for 5-year renewable terms and report to the Dean of the Sam Fox School, the school's chief academic and administrative officer. As such, Professor Heather Woofter assumed the title "Director" on July 1, 2017, following Dean Bruce Lindsey, who stepped down to return to the faculty on June 30, 2017.

The restructuring also created program chair positions in Graduate Architecture, Landscape Architecture, Urban Design, Undergraduate Architecture, Graduate Art, Studio Art, and Design. The role of the chairs is to oversee operations in their respective program area and to collaborate with fellow chairs to develop and implement strategic initiatives. Chairs are appointed by the respective director in consultation with the dean for three-year, renewable terms. The directors of Architecture, Art, and the Mildred Lane Kemper Art Museum work with the dean and the Associate Dean for Finance to develop budgets for their units. Directors also work closely with program chairs to plan for fiscal needs across the programs and ensure financial planning for both short-term and long-term resources.

I.2.3 Physical Resources

Visiting Team Report (2012): The visiting team found that the physical resources of the Sam Fox School of Design and Visual Arts at Washington University are adequate for the M. Arch program within the Department of Architecture. Enough space is allocated for the typical student work area to allow for studio-based as well as didactic and interactive learning, both of which are requisite to promoting architectural education. The uniting of the academic units of Art and Architecture with the Kemper Museum to form the Sam Fox School of Design and Visual Arts in 2006 has significantly increased the physical resources. The addition of the Kemper Art Museum, digital fabrication labs, Art and Architecture Library, lecture halls and other key spaces has expanded the space available to the professional graduate architecture program. The 2007 renovations to Steinberg Hall have further improved studio spaces.

However, the visiting team has some concerns regarding this condition. The doubling of graduate enrollment since 2006 has neutralized many of the improvements simply by over-subscription to the space available. Studio space allocated to the M. Arch has been maximized, and studios are spread among five buildings. These have positive and negative consequences. On one hand, students from the various programs—art, architecture, landscape architecture, and urban design— share spaces. This increases the potential for cross-pollination and improves the chances for developing the interdisciplinary identity the Sam Fox School aims for. On the other hand, M. Arch students are dispersed, impacting their sense of community, and thereby generating some tension. No flexibility remains for increasing future enrollment. A lack of space for design review pin-ups, meetings, and gatherings associated with studio places restrictions on studio life and limits opportunities for interactive learning. The faculty offices are now shared by up to three full and part-time faculty members. This space limitation results in diminished effectiveness in advising, scholarship, and research work. Also, universal accessibility is challenged, particularly in the areas connecting Givens, Steinberg and Bixby Hall. A member of the academic community or guest with mobility challenges will find the connecting paths confusing and difficult. Student mobility with large models and construction components on connecting stairwells is limited.

The current preplanning for a new facility, including the enhancement of faculty offices for graduate student programs, will allow the return of students and programs now off campus to the new unified Sam Fox School campus. The enthusiasm for this significant additional facility by the chancellor indicates that concerns on this condition will be resolved in the foreseeable future.

Program Activities in Response [Year of previous visit (2012) – Year of APR (2017)]:

Construction commenced in May 2017 on Anabeth and John Weil Hall. This new facility will house graduate Art and Architecture programs as well as interdisciplinary Sam Fox School resources. Construction is scheduled for Fall 2019 and a backfill strategy is currently in progress. Please reference I.2.2 Physical Resources for more information.

Section 3. Compliance with the Conditions for Accreditation

I.2.1 HUMAN RESOURCES & HUMAN RESOURCE DEVELOPMENT

Distinguished Faculty

In 1986, Architecture received its first endowed chair, the Ruth and Norman Moore Distinguished Professorship in Architecture. The distinguished architectural historian Udo Kultermann was the first holder of this chair until his retirement in 1994. In 1996, the South African architect Jo Noero succeeded Kultermann, until his departure in December 2001. In November 2007, architect and educator Robert McCarter assumed this chaired professorship. The Moores also honored architecture in 1991 by establishing the Ruth and Norman Moore Visiting Professorship, held by a succession of renowned practitioners and critics, including recent visitors Peter Rose, Nanako Umemoto, and Erik L'Heureux. The Raymond E. Maritz Professorship was established in 1996 in honor of a prominent local architect. Adrian Luchini, the current interim chair of graduate architecture, holds the Raymond E. Maritz full-time faculty chair, while Juhani Pallasmaa, the distinguished Finnish architect and educator, served as the Maritz Visiting Professor through 2004. Paul J. Donnelly was named the first Rebecca and John Voyles Professor in 1999 until his retirement. In 2014, Eric Mumford was also named the Rebecca and John Voyles Professor of Architecture. In September 2006, Carmon Colangelo, dean of the Sam Fox School, became the E. Desmond Lee Professor for Community Collaboration in the Arts: he was installed as the Ralph J. Nagel Dean in 2016. In 2007, Bruce Lindsey, former dean of the College of Architecture and Graduate School of Architecture & Urban Design, was named the E. Desmond Lee Professor for Community Collaboration in the Sam Fox School. In 2011, Kathryn Dean became the JoAnne Stolaroff Cotsen Professor of Architecture.

Faculty Resumes

For resumes of the full-time instructional faculty who teach in the professional degree program, please click <u>here</u>.

Faculty Credentials Matrices

For a matrix for each of the two academic years prior to the preparation of the APR, please click here.

Faculty Development

The Sam Fox School offers a variety of resources to assist faculty members in remaining current in their knowledge of the changing demands of the discipline, practice and licensure. The school has a dedicated <u>Sam Fox School Research Office</u>, which provides support for faculty and students seeking internal and external funding, as well as the <u>Office for Socially Engaged Practice</u>, which facilitates faculty and student work in the community through socially engaged courses and offers funding for community based-projects. The school also has a robust <u>Public Lecture Series</u> that features nationally and internationally recognized artists, architects, designers, historians, and critics. Additionally, the school supports faculty development through funded and non-funded conference and symposia attendance and participation.

The Sam Fox School also provides funding for faculty development. Full-time senior lecturers, professors of practice, and tenured and tenure-track faculty are awarded Faculty Development Accounts to support research and teaching activities. The development accounts range from \$1,000-\$7,500 for each academic year. The school also awards <u>Creative Activity Research Grants</u> and <u>Faculty Teaching</u> <u>Development Grants</u>. The Creative Activity Research Grants provide between \$1,000-\$8,000 to support faculty conducting research or pursuing innovative creative work; through this program, the school provides total funding of \$25,000-\$30,000 per year for art and architecture faculty. The architecture faculty recipients since the last accreditation visit include:

2017-2018 Grant Recipients

- Chandler Ahrens, assistant professor
- Pablo Moyano, senior lecturer
- Linda C. Samuels, associate professor

2016-2017 Grant Recipients

• Catalina Freixas, Assistant Professor

2015-2016 Grant Recipients

- Rod Barnett, professor
- Jacqueline Margetts, senior lecturer
- Derek Hoeferlin, assistant professor
- Stephen Leet, professor

2014-2015 Grant Recipients

- Chandler Ahrens, assistant professor
- Patty Heyda, assistant professor
- Igor Marjanović, associate professor

2013-2014 Grant Recipients

- Catalina Freixas, assistant professor
- Pablo Moyano, senior lecturer
- Lindsey Stouffer, senior lecturer

2012-2013 Grant Recipients

- Patty Heyda, assistant professor
- Natalie Yates, assistant professor
- Igor Marjanović, associate professor
- Eric Mumford, professor

2011-2012 Grant Recipients

• Robert McCarter, Ruth and Norman Moore Professor of Architecture

Four Faculty Teaching Development Grants are awarded annually in the amount of \$2,500 to recognize contributions in teaching, support innovation, and incentivize activities to further enrich the school through student instruction. All Sam Fox School tenured and tenure-track faculty, full-time senior lecturers, lecturers, and visiting faculty who have taught for at least one year can apply. The awardees present their grant outcomes at an annual faculty teaching roundtable. The recent architecture recipients include:

2016-2017 Faculty Teaching Development Grants

- Linda C. Samuels, associate professor
- Lavender Tessmer, lecturer

2015-2016 Faculty Teaching Development Grants

- Elena Cánovas, senior lecturer
- Carloyn Gaidis, lecturer
- Pablo Moyano, senior lecturer

2014-2015 Faculty Teaching Development Grants

- Chandler Ahrens, assistant professor
- Elisa Kim, lecturer
- Stephen Mueller, visiting assistant professor

In addition to grants, faculty can make a request for Initiative Funds. The funds are provided by the dean of the Sam Fox School and allow for a number of faculty initiatives, ranging from new digital technologies to the opportunity to host a conference or symposium at Washington University.

Tenured faculty can also take <u>sabbatical leaves</u> or a unpaid <u>academic leave of absence</u> to advance research and creative activity. The leaves are granted through an application process. Sabbatical leaves are typically granted as a full-year leave with half salary from the university or a one-semester leave with full salary from the university.

Faculty Resources

The Sam Fox School Research Office supports research and creative activity by working with faculty and students to define projects, seek funding, and identify internal and external partnerships. The office works to facilitate the pre- and post-granting process; serves as liaison to the broader research infrastructure of the university; and gives advice on institutional compliance during projects. While institutional funding is important to furthering projects, the office also assists with a broad range of activity that includes partnerships that contribute to the research culture of the school.

Faculty are able to apply for funding from a variety of university seed grants that range from \$1,000-\$35,000. Examples include:

- The International Center for Energy, Environment and Sustainability (InCEES) provides annual seed funding to faculty undertaking research in the broad areas of bioenergy and sustainability, as well as support for seeking federal funding and partnerships, both at the University and within the industry.
- The Ferguson Academic Seed Fund (FASF) provides small grants to start new research initiatives, develop class content and modules, host discussion sessions, invite external scholars for residencies, and offer other intellectually engaging activities that helped tackle the complex set of issues underscored by events in Ferguson, Missouri, in 2014.
- The LEAP Inventor Challenge engages and trains teams of faculty, postdocs, graduate students, and staff toward commercial development of their technology or product.
- The Gephardt Institute for Civic and Community Engagement's Civic Engagement Fund cultivates community engagement initiatives that strengthen communities. Through Capacity Building Grants, Small Change Grants, and Need-Based Grants, all members of the Washington University community may request funding and support for their proposed initiatives.

Faculty also receive support from a team of foundation and corporate relations officers that consult oneon-one to identify research interests and seek out potential funding opportunities. As part of a tier-one research institution, we have a team of specialists, coordinated through the school's research office, that supports budgeting, proposal preparations, grant writing, and overall administration pre- and post-award. The Office of the Vice Chancellor for Research also provides educational and training activities related to research best practices, policies, and compliance support for all research activity. Faculty can also become scholars through affiliations with centers and institutes across the university, such as the Institute for Public Health or the Gephardt Institute. Such relationships provide cohorts of like-minded scholars in other disciplines with whom to collaborate.

Faculty Research

Chandler Ahrens, assistant professor, has been working on a series of research projects that negotiate the intersection of digital technology and sustainability. The Klimasymmetry project investigated the integration of a radiant heating and cooling system into custom geometric wall panels made from Glass Fiber Reinforced Gypsum (GFRG). Digital technology was used in the design process to predict the behavior using CFD (computational fluid dynamics) software that provides heating and cooling to specific areas of the body. His current research creation project, Catoptric Surface, is focused on harvesting daylight to be reflected into the interior of a building using microprocessors and motors to individually control 700 mirrors. Through individual control of each mirror, the light intensity can be controlled by targeting specific locations within the space to reflect the daylight, thus reducing the need for artificial light when someone needs more or less light for a particular task. Both research projects advance the ideas of

sustainable architecture and energy efficiency through the use of technology to predict the behavior, manufacture the prototype, and operate the systems efficiently.

Ahrens is also a founding partner of Open Source Architecture. In 2016, Ahrens and Christof Jantzen of Studio Jantzen received a Merit Award in AIA Los Angeles' 2016 Design Awards program for their project, Rajeunir. Ahrens also received the 2017 Emerging Faculty Award from the Building Technology Educators' Society. The award recognizes demonstrated excellence in teaching performance and innovation during the formative years of an architectural teaching career in building technology education.

Rod Barnett, professor and chair of landscape architecture, is part of an interdisciplinary team of Washington University faculty that is working on the Baden Pilot Project, recipient of a faculty research award from the University's International Center for Energy, Environment and Sustainability (InCEES). Partnering with St Louis' Urban Vitality & Ecology Initiative, multiple stakeholders are working to redevelop portions of the Baden neighborhood in North St. Louis, which is marked by a spate of recent home foreclosures and located near old streambeds, resulting in chronic flooding and sewage backups. The WashU team is investigating the interrelationships between the air, water, soil, microbes, biodiversity, and community. Specifically, the team will collect baseline data to characterize the natural and social environment in its current state, and then design optimal strategies for sustainable development of this area. Barnett is also working on a research project to catalogue and evaluate all of the parks within the St. Louis area in order to support future investment in the region's parks. He co-authored the book *The Modern Landscapes of Ted Smyth: Landscape Modernism in the Asia Pacific* (Routledge, 2017) with senior lecturer **Jacqueline Margetts**.

Kathryn Dean, the JoAnne Stolaroff Cotsen Professor of Architecture and co-founder of Dean/Wolf Architects in New York City, was lead designer on the recently completed Queens Hospital Emergency Medical Services Station 50, recipient of a 2016 American Architecture Prize and featured in *Architectural Record* in March 2017. Dean/Wolf Architects has earned a reputation for breathing new life into contemporary residential architecture, completing dozens of homes and major interior renovations. Dean has published *Dean Wolf Architects: Constructive Continuum* (Princeton Architectural Press, 2011) and *Constructive Practices, Between Economy and Designer* (Columbia University, GSAPP, 2008), which features selected works of her design practice. Dean also received a 2016 Design Excellence Award from the University of Florida's College of Design, Construction & Planning for excellence in design practice and contributions to the School of Architecture.

Gia Daskalakis, associate professor, is the principal of Das: 20 Architecture Studio in St. Louis. Recent projects include the programming and surveying of Urban Park on the Province of Santa Fe, Argentina; a showroom for an industrial design company, Munimula; and a new design studio building to include a three-acre landscape in Quincy, Michigan. Scholarly research includes the deliberate blurring, hybridization, and expansion of the traditional semantic and historical categories of landscape, architecture, and urbanism and their interface with ecology and environment, as well as spatial and experiential characteristics common to American cities (focused on Detroit) that are experiencing a process of aggressive deurbanization and physical abandonment. Additionally, Daskalakis researches the contested edge between the Mississippi River and the adjacent, occupied land between development and commerce. Looking toward a more resilient condition, the research explores the ecological crisis along the river as an opportunity for constructing a more livable, coupled edge as a continuum between river and settlement.

Eric Ellingsen, assistant professor, founded Species of Space (SOS) in 2009, implementing tools from many different bodies of knowledge to create spatial narratives entangling experimentation and pedagogy as art forms. Through the design of site- and institution-specific works, he advocates for a living-learning agency, which involves growing spatial languages and the ability to translate meanings and values across disciplines. Through the design and choreography of situations, encounters, public art installations, curation, poetry, walks, and performances, Ellingsen seeks to construct alternative ways of perceiving and using public spaces that empower communities and citizens as agents in the design and self-determination of their own spaces, stories, and lives. From 2009-2014, Ellingsen co-directed and taught at the Institute for Spatial Experiments, a five-year education project started by artist Olafur Eliasson and affiliated with the Berlin University of the Arts. Recent and forthcoming publications

include *Twisted* (Broken Dimanche Press, 2017), *GAM. 13: Spatial Expeditions* (Graz Architecture Press, 2016), *Some Pigeons Are More Equal Than Others* (Lars Muller Publishers, 2015), *MODELS, 306090* (Princeton Architecture Press, 2008), *BOMB online, World Literature Today*, and *Forty-Five*, a journal of outside research.

Ellingsen works and exhibits internationally, including at the Palais de Tokyo in Paris and the Sullivan Galleries in Chicago, and has been involved in a long-term collaboration with Ethiopian poets, musicians, and artists. He received an ARTECITYA artist residency (Thessaloniki, Greece) in 2016, a *Library of Water* residency in Iceland in 2014, and two Graham Foundation grants to individuals in 2012 and 2014. In 2017, Ellingsen and his partner, Lynn Peemoeller, will open LEEP, an urban design lab specializing in play, project-based learning, urban food systems, and adventure playgrounds.

Catalina Freixas, assistant professor, launched the seminar Segregation in Design in fall 2016 in collaboration with Mark Abbott, professor of history and director of the Center for Neighborhood Development at Harris-Stowe State University. Developed as part of The Divided City: An Urban Humanities Initiative, funded by the Mellon Foundation, the research explores both the historic roots and present-day reality of residential urban segregation, and the mechanisms that have institutionalized inequality in the American city. Freixas is a two-time recipient of grants through The Divided City initiative, which have allowed her to research issues of race, segregation, and urbanism in post-industrial cities such as St. Louis, Cincinnati, and Detroit through the lens of indicators for sustainability, inclusion, and community resiliency. Additional support for this work was provided by the Ferguson Academic Seed Fund and the Sam Fox School's Creative Activity Research Grants program to complete the book proposal Segregation by Design: Conversations and Calls for Action from St. Louis. Freixas is a two-time recipient of funding from the International Center for Energy, Environment, and Sustainability (InCEES) and received additional support from the University Research Strategic Alliance (URSA) for her research on Metamorphic Cities: A Computational Approach to Sustainability, a multi-phase project focused on developing a methodology and computational model for conducting a quantitative sustainability assessment. particularly focused on the effects of eco-urbanism strategies at various scales of impact. Freixas has also received funding from the School's Center for Health Research & Design to research and develop a methodology for the optimization of health care office spaces.

Bob Hansman, associate professor, leads the School's community studies courses, and has had his students work with residents of the 22nd Ward in St. Louis, City. He also has taught introductory and advanced drawing and painting classes at all levels of the curriculum. In 2015, the University's Gephardt Institute for Civic and Community Engagement appointed Hansman as one of its inaugural Community Engagement Faculty Fellows. In this role, he serves as a resident expert on the St. Louis region, providing guest lectures and tours of St. Louis as a "divided city." An accomplished artist, he has held several solo exhibitions of his work in and around the St. Louis area. Hansman is also highly involved in community programs. His work as director of City Faces and the Jermaine Lamond Roberts Memorial Art Studio in the Clinton-Peabody Housing Project has garnered national attention and awards. Hansman authored *Pruitt-Igoe* (Arcadia Publishing, 2017) about the vast public housing project that arose on 57 acres on the near north side of St. Louis in the early 1950s.

Patty Heyda, associate professor, studies the particularities of contemporary redevelopment in American cities, with a focus on the less visible yet mainstream processes reproducing uneven landscapes in cities such as St. Louis. Her *Invisible Cities, Anatomy of Redevelopment*, and *Erasure Urbanism* work spans drawing research, writing, and teaching to illuminate political and economic factors shaping sites across the St. Louis region. Heyda's recent book co-authored with David Gamble, *Rebuilding the American City* (Routledge, 2016), provides a detailed cross-section of urban design and planning strategies decision makers in American cities use to implement redevelopment amid ongoing challenges. Heyda runs City Seminar, a long-standing, interdisciplinary cross-campus colloquium series. She is also a contributor to the Material World of Modern Segregation project organized by the American Culture Studies program at Washington University. Last year, Heyda secured a Ferguson Academic Seed Fund grant to develop an interdisciplinary seminar titled Invisible/Cities. The course examines facets of "invisibility" as a spatial, political, and social condition of suppression marked by mainstream redevelopment in American cities like St. Louis (but existing, in fact, in all American cities). Most recently, Heyda and colleagues in the university's Department of Sociology received a grant from The Divided City initiative to establish a first-

of-its kind joint undergraduate capstone course for sociology and architecture majors—and a future crosscampus collaborative research lab between the departments—focused on urban inequality and the city.

Derek Hoeferlin, associate professor and principal of [dhb] derek hoeferlin design, is a two-time recipient of funding from the International Center for Energy, Environment and Sustainability (InCEES), most recently for his research project titled Way Beyond Bigness: A Watershed Architecture Manifesto + Methodology. The multi-year, multidisciplinary collaborative effort is focused on design disciplines' important roles in the documentation, comparison, speculation, and engagement of complex issues of water management and climate change, via research between global river basins. Hoeferlin's past work has studied primarily three river basins-the Mekong, Mississippi, and Rhine-and the work has been conducted with a broad, multidisciplinary, collaborative network. Hoeferlin's forthcoming book manuscript is titled Applied Research + Design. He has also contributed a journal chapter in Scenario 06: Migration, titled "The Continental Compact: Eastward Migration in a New (New) World," as well as a book chapter, "Architectural Activist through Multiple Scales, Venues, Programs, and Collaborations," in New Orleans Under Reconstruction: The Crisis of Planning" (Verso Publishers, 2014). Recent exhibitions include The Continental Compact/Dry Futures Competition (Washington University in St. Louis; University of Texas at San Antonio, 2015), 10 Years I 10 Stories (American Institute of Architects New Orleans Center for Design, 2015), and Living with Water (American Institute of Architects New Orleans Center for Design, 2012).

John Hoal, professor and chair of urban design, and Hoeferlin are co-principal investigators for "Climate Adaption Performance Model for Fluvial Zones along the Mississippi, Missouri and Illinois Rivers in the Midwest." Funded by the International Center for Energy, Environment and Sustainability (InCEES), the team will develop a Climate Adaptation Performance Model (CAPM) to be the framework for future multidisciplinary workshops that will continue collaborations with partners such as The Royal Netherlands Embassy in Washington D.C., American Rivers, Earth Economics, the U.S. Army Corps of Engineers, and local stakeholders. The CAPM will be a crucial and instrumental intermediate benchmark in setting the long-term research methodology for a new design paradigm for how we live more sustainably within fluvial zones along great rivers.

In 2014, Hoal convened designers, engineers, hydrologists, planners, and other professionals—along with a handful of Sam Fox School faculty, students, and young alumni—into an international group known as Studio MISI-ZIIBI. In fall 2015, Studio MISI-ZIIBI was among three winners in Changing Course, a global competition charged with developing a 100-year plan for stabilizing the lower Mississippi River delta. Hoeferlin was a core design team member. The project also won a AIA St. Louis Architects Citation Award in the Unbuilt category. Hoal was also invited by the president of the Pontifical Academy of Sciences and the president of the Pontifical Academy of Social Sciences to present a paper on biodiversity and sustainable city design at a joint workshop of the two Pontifical Academies in Vatican City focused on the topic of biological extinction.

Sung Ho Kim, professor, coordinates Architecture's graduate core and digital media curriculum. Kim collaborates with biologists, engineers, urbanists, and medical professionals; his research is in design practice and development of spatial and formal operations merged with material and physical organizations. Kim has published, lectured, and exhibited internationally and is currently a design principal of Axi:Ome LLC in St. Louis with his partner, **Heather Woofter**, professor and director of the College of Architecture and Graduate School of Architecture & Urban Design. Recent commissioned projects include a renovation of an addition to the existing Eric Mendelsohn building for COCA (Center of Creative Arts) in St. Louis; Silverlake International High School in Hangzhou, China; and Olive West, a redevelopment project in St. Louis' Grand Center district. Since the last accreditation visit, Kim has completed nine publications. In 2016, Kim and Woofter completed the monograph *Axi:Ome* (C3 Architectural Press) and *3 Stages of Architectural Education* (Damdi Architectural Press).

Stephen Leet, professor, is the author of the book *Richard Neutra's Miller House* (Princeton Architectural Press, 2004) and the essay "House and Garden with Two Courtyards" in *Paul Amatuzzo, Practice* (2010). Leet received Sam Fox School Creative Activity Grants to pursue the Neue Grafik project (2015) and a Shiro Kuramata monograph (2010). Most recently, he curated *Red*, an exhibition in the Teaching Gallery of the School's Mildred Lane Kemper Art Museum that was on view September 20, 2014, through

January 6, 2015. The exhibition explored the use of the color red in a variety of media, including painting, prints, books, and design objects from the eighteenth century to today.

Zeuler Rocha M. de A. Lima, associate professor, authored *Lina Bo Bardi* (Yale University Press, 2013), the first comprehensive study of the Italian-born Brazilian architect's career. Lima is a leading authority on Bo Bardi, and the biography showcases his extensive archival work in Italy and Brazil. In the book, he frames the architect's activities on two continents and in five cities, and examines how considerations of ethics, politics, and social inclusiveness influenced Bo Bardi's intellectual engagement with modern architecture while providing an authoritative guide to her experimental, ephemeral, and iconic works of design. Lima delivered a lecture at the opening of his pedagogical exhibition *Lina Bo Bardi: Built Work* at Escola da Cidade in Sao Paulo, Brazil. The exhibition, realized as part of a research project developed with several Sam Fox School graduate students, featured a timeline of digital analytical renderings and photographs of Bo Bardi's built architecture projects between 1948 and 1989.

Bruce Lindsey, former dean of the College of Architecture and Graduate School of Architecture & Urban Design and the E. Desmond Lee Professor for Community Collaboration, is a principal investigator (with Jean Allman, PhD, director of the Center for the Humanities in Arts & Sciences at Washington University) on a four-year \$650,000 grant awarded by the Mellon Foundation to support The Divided City: An Urban Humanities Initiative. Launched by the University in 2014, the \$1.6 million project examines both the history and present-day reality of segregation from a variety of perspectives, including architecture, anthropology, business, economics, landscape architecture, law, public health, social work, and urban design. The initiative has included numerous faculty grants; recipients have included architecture faculty **Eric Mumford, Catalina Freixas, Jesse Vogler, Michael Allen, and Heather Woofter**, among others. Lindsey also served a three-year term on the Association of Collegiate Schools of Architecture (ACSA) board: president-elect (2015), president (2016), and past president (2017).

Adrian Luchini, the Raymond E. Maritz Professor of Architecture and interim chair of graduate architecture, is the principal of LuchiniAD. Recent projects include the Early Childhood Education Center at Harris-Stowe State University, the Stone Residence House addition and the Globe Building renovation in St. Louis, and the Coastal Park Project in Shenzhen, China. As the director of international programs for the Graduate School of Architecture & Urban Design, he is constantly researching new opportunities for the School's abroad programs. He is currently planning a new semester-long program in Mumbai, India, that will launch in spring 2018, in addition to overseeing the existing programs in Barcelona, Buenos Aires, and Berlin. He continues to practice and lecture extensively both in the United States and abroad and is finishing a second book focusing on the Midwest, the phenomenon of sprawl, and his projects built in this region. His work has been published in several books in China and in several European journals, including *Domus, Casabella*, and *Abitare* (Italy); *Quaderns* (Spain); *A+U* and *Global Architecture* (Japan), *Space* (South Korea); *Tasarim* (Turkey); *South America* and *El Mercurio* (Chile); *Summa* (Argentina), and *El Arqa* (Uruguay).

Igor Marjanović, professor and chair of undergraduate architecture, and Jan Howard (chief curator and Houghton P. Metcalf Jr. Curator of Prints, Drawings and Photographs at the RISD Museum) co-curated *Drawing Ambience: Alvin Boyarsky and the Architectural Association*. The exhibition, which debuted at the School's Mildred Lane Kemper Art Museum in fall 2014, presents architectural drawings from the private collection of the noted educator Alvin Boyarski, long-time chairman of the Architectural Association School of Architecture (AA) in London. The collection features early drawings by celebrated architects such as Frank Gehry, Zaha Hadid, Daniel Libeskind, Rem Koolhaas, and Bernard Tschumi, among many others. Marjanović is also co-editor, with Jelena Bogdanovic and Lilien Robinson, of *On the Very Edge: Modernism and Modernity in the Arts and Architecture of Interwar Serbia (1918-1941)* (Leuven University Press, 2015), which furthers the understanding of art and architecture within diverse cultural geographies.

Robert McCarter, the Ruth and Norman Moore Professor of Architecture, analyzes architecture as it is experienced by the inhabitant, with particular emphasis on the occupation of interior space, the methods and materials of construction, and their interrelationship. McCarter has had articles and chapters published in numerous professional, scholarly, and monographic publications, including *The Encyclopedia of 20th Century Architecture; The Oxford Companion to United States History; The Great*

Builders: The Oxford Encyclopedia of Aesthetics: L'architrave. le plancher, la plate-bande: A New History of Construction, Volume II; 50 Key Thinkers on the Environment; Wendell Burnett: Dialogues in Space; The Limits of Form: Enrique Norten TEN Arquitectos; A Living Tradition: KPF Arkitekter; Common Places: Brian Healy; Dean/Wolf Architects: Constructive Continuum; Allied Works Architecture: Clyfford Still Museum; Ghost: Building an Architectural Vision; Archipelago: Essays on Architecture; Roma Razionalista: Roberto Caracciolo; Construction Reality: The Architecture of Donal Singer; Frank Lloyd Wright: Windows of the Darwin Martin House: Four Florida Moderns; and Masters of Concrete; in professional and scholarly journals including Journal of Visual Culture: Joural of Architectural Education: Investors' Business Daily; Progressive Architecture; Vorkurs (University of Florida School of Architecture Graduate Student Publication): Contract: and Theology Today: and in international journals including Ptah: Architecture Design Art (Finland); Global Architecture: Houses (Japan); Architektur & Bauforum (Austria); Form (Sweden); The Senses and Society (Canada); Hise (Slovenia); Betong (Concrete, Sweden); Global Danish Architecture (Denmark); Architecture Today (UK); Ehituskuust (Estonia); Architect's Bulletin (Slovenia); Progetti (Italy); and Concrete International, among others. McCarter has also authored numerous books, including The Work of MacKay-Lyons Sweetapple Architects: Economy as Ethic (Thames & Hudson, 2017), The Space Within: Interior Experience as the Origin of Architecture (Reaktion, 2016), Marcel Breuer (Phaidon, 2016), Steven Holl (Phaidon, 2015), Aldo van Eyck (Yale University Press, 2015). Herman Hertzberger (nai010, 2015), and Local Architecture, with Brian MacKav-Lyons (Princeton Architectural Press, 2015).

Eric Mumford. PhD. the Rebecca and John Voyles Professor of Architecture, is the author of The CIAM Discourse on Urbanism, 1928-1960 (MIT Press, 2000), Modern Architecture in St. Louis: Washington University and postward American architecture, 1948-1973 (Washington University/University of Chicago Press, 2004), Defining Urban Design: CIAM Architects and the formation of a discipline, 1937-1969 (Yale University Press, 2009), and the forthcoming textbook Designing the modern city: urbanism since 1850 (Yale University Press, 2018). He has also published several edited books and many scholarly articles and other publications. Other recent publications include the edited collection The Writings of Josep Lluís Sert (Yale University Press and the Harvard Graduate School of Design, 2015) and numerous book chapters and articles, including "Paul Rudolph and the Heart of the City" in Timothy M. Rohan's upcoming publication Reassessing Rudolph, 2017 by Yale School of Architecture; "Golden Lane: Alison and Peter Smithson" in David Leatherbarrow and Alexander Eisenschmidt's upcoming publication The Companions to the History of Architecture: Volume IV. Twentieth-Century Architecture; and "Fumihiko Maki, Mildred Lane Kemper Art Museum building" in Sabine Eckmann's Spotlights: Collected by the Mildred Lane Kemper Art Museum. Mumford is also the co-editor, with Seng Kuan, of Fumihiko Maki and Group Form (Lars Muller, forthcoming) and is co-curating the forthcoming exhibition Transformative Visions: Landscape, Art, and Design for the East End of the Danforth Campus for the School's Mildred Lane Kemper Art Museum.

Linda C. Samuels, PhD, associate professor, served as faculty advisor for graduate students Anu Samarajiva, Lanxi Zhang, and Irum Javed, who recently won the Urban SOS: Fair Share competition sponsored by AECOM, 100 Resilient Cities, and the Van Alen Institute for their project titled First Class Meal. Her recent publications include "Top I Up Urbanism: Testing Agency in the Changing City" in *Amplified Urbanism*, published by Lorcan O'Herlihy Architects, and "Resistance at the Trench: Why Efforts to Reinvent the 101 Freeway in Downtown Los Angeles Continue to Fail" in the *Journal of Planning History*. Additionally, Samuels was awarded a \$20,000 grant from The Divided City initiative as a co-principal investigator for the development of top-up infrastructural planning with the aim of increased quality of life and well-being; the project is titled Mobility for All by All. Samuels is in the process of negotiating a book contract with Routledge for *Infrastructural Optimism*, which will serve as a source for establishing the discourse of infrastructural urbanism.

Constance Vale, assistant professor, is an architectural designer and partner in the research and design practice Vale Collins Studio, based in Los Angeles and New York. The practice undertakes conceptual and aesthetic investigations with an interest in the relationship between art and architecture. In addition to working on speculative projects with Tyler Seth Collins, she recently completed a collaboration with SCI-Arc faculty Emmett Zeifman on a temporary theater for The Industry's production of *Hopscotch: A Mobile Opera for 24 Cars*. Vale's work was recently featured in "In Praise of Failure and Forgetting" in *Archinect*

Cross Talk: Pedagogy; the "NRA Drawing Series I/A & B 1876 - Present" in *Clog x Guns*, edited by Kyle May, Julia van den Hout, Jacob Reidel, Archie Lee Coates IV, and Jeff Franklin (2016); and "An Opera House for a Show on Wheels" by Nate Berg in *The Journal of the American Institute of Architects* (2015). Recent exhibitions include *architecture, architectural & Architecture* at A+D Museum in Los Angeles and the 2017 Feldman Exhibition at Yale School of Architecture.

Jesse Vogler, assistant professor, collaborated with **Michael Allen** (senior lecturer and University College coordinator for the American Culture Studies program), Angela Miller (professor of art history and archaeology in Arts & Sciences), and Andrew Theising (associate professor of political science at Southern Illinois University in Edwardsville) on the launch of Charting the American Bottom: St. Louis and Its Divided Periphery. Conceived with Matthew Fluharty, PhD, a postdoctoral research fellow in the American Culture Studies program, the project brings together ten scholars and artists from across numerous disciplines to contribute innovative, cross-disciplinary essays that cut across abiding disciplinary divides in addressing The American Bottom. Vogler was also awarded a Fulbright U.S. Scholar Program grant to study abroad during the 2015-2016 academic year; he spent six months in Tbilisi, Georgia, conducting research on the territorial and ideological landscapes of the sovkhoz, or the soviet state farm system.

Heather Woofter, professor and director of the College of Architecture and Graduate School of Architecture & Urban Design, is a founding director and owner of Axi:Ome IIc in St. Louis with **Sung Ho Kim**. Their design practice has received national and international design awards for architecture (built work and competitions), master planning, and industrial design. Axi:Ome has been profiled in several monographs, most recently *Axi:Ome* (C3 Architectural Press, 2016) and *3 Stages of Architectural Education* (Damdi Architectural Press, 2016). Woofter curated the exhibition *Metabolic City*—which featured works by the Japanese Metabolists, the architecture collaborative Archigram from Britain, and Dutch artist Constant—at the School's Mildred Lane Kemper Art Museum in 2009-2010. In 2016, Woofter received a \$15,000 grant from The Divided City initiative for her seminar Citizen Space in collaboration with Eve Blau from Harvard Graduate School of Design and senior lecturer **Michael Allen**. She also organized the Women in Architecture symposium in collaboration with Sam Fox School assistant dean **Nicole Allen** and lecturer **Hannah Roth**, which was funded by a \$15,000 Diversity and Inclusion Grant from the university. Woofter's research is in a design practice that engages multiple scales of work, experimenting with spatial constructions.

Honxgi Yin, InCEES Associate Professor, Pablo Moyano, senior lecturer, and Ryan Abendroth, senior lecturer, are lead faculty for CRETE House, a solar-powered, 995-square-foot residence being designed and fabricated by Team WashU for the 2017 Solar Decathlon. The project team also includes University collaborators Tim Michels (Department of Energy, Environmental and Chemical Engineering in the School of Engineering & Applied Science), Chenyang Lu (Department of Computer Science & Engineering in the School of Engineering & Applied Science), and Steve Bannes (program director for the Sever Institute in the School of Engineering & Applied Science), as well are many industry partners and more than 100 students. The goal is to research the durability and resiliency of concrete when used for residential construction and confronted with tornados, hurricanes, and earthquakes. The building will eventually become part of the Tyson Research Center, a living laboratory for visiting scientists at Washington University.

Funding Sources

Funding sources come from within the school, university, and external. Internal grants range on average from one to eight thousand dollars. University grants range from one to thirty-five thousand dollars. School and university level grants constitute the bulk of seed grants for our faculty. External funding has ranged in size from ten to hundreds of thousands.

Sam Fox School

Faculty Creative Activity Research Grants Steedman Fellowship CityStudioSTL Grants

Washington University

International Center for Energy, Environment and Sustainability (InCEES) Skandalaris Center for Interdisciplinary Innovation and Entrepreneurship's LEAP Inventor Challenge Gephardt Institute for Civic and Community Engagement Institute for Public Health (IPH) Office of the Provost

External Sponsors

ACLS Collaborative Research Fellowships AIA Upjohn Research Initiative American Academy in Rome **Beverly Willis Architecture Foundation** Boston Foundation for Architecture Building America — Resources for Energy Efficient Homes (under the DOE) Center for Architecture Foundation: Arnold W. Brunner Grant Center for Architecture Foundation: Stewardson Keefe LeBrun Travel Grant Centers for Disease Control Centers for Disease Control Department of Transportation Department of Transportation **Environmental Protection Agency** Furthermore Foundation Graham Foundation Housing and Urban Development HUD-DOT-EPA Partnership for Sustainable Communities James Marston Fitch Charitable Foundation John Simon Guggenheim Memorial Foundation **Kresge Foundation** Latrobe Prize Missouri Health Foundation National Endowment for the Arts National Endowment for the Humanities National Institute of Health National Science Foundation Rafael Viñoly Architects Training and Research Programs Robert Wood Johnson Foundation **Rotch Traveling Scholarship** Surdna Foundation The American Architectural Foundation, Inc. U.S. Department of Energy's Solar Decathlon Van Alen Institute — Projects in Public Architecture Whitaker Foundation

Large-Scale Research Initiatives

The Divided City: With the generous support of the Mellon Foundation, the Center for the Humanities in Arts & Sciences, in partnership with the College of Architecture and Graduate School of Architecture & Urban Design, launched The Divided City: An Urban Humanities Initiative. The goal of the \$1.6 million project is to bring humanities scholars into productive interdisciplinary dialogue with architects, urban designers, landscape architects, legal scholars, sociologists, geographers, GIS cartographers, and others around one of the most persistent and vexing issues in urban studies: segregation. Transdisciplinary projects include *Charting the American Bottom: St. Louis and its Divided Periphery* and *Segregation by Design: A Historical Analysis of the Impact of Planning and Policy in St. Louis.*

Center for Health Research & Design: In July 2016, Xiaobo Quan, professor of practice, joined the Sam Fox School as director of its new Center for Health Research & Design (CHRD), a multidisciplinary

research center aimed at improving the physical and virtual environments for health and delivery of care. Seed funding through BJC HealthCare supports research projects that include ambulatory care, inpatient room standards, and office environments. The CHRD leverages its position within a top-tier research university to address challenges posed by changing health care delivery and wellness requirements. Research in architecture, urban design, communication design, and art is integrated with collaborations with academic partners, delivery providers, design practitioners, and professional organizations in relevant fields across the University and the greater St. Louis region. Quan and Valerie Greer, professor of practice and coordinator of graduate architecture, are the principal investigators of this initiative.

Solar Decathlon: Over the last two years, more than 100 students from the Sam Fox School and the School of Engineering & Applied Science have worked with faculty and industry partners to design, fabricate, and construct CRETE House, Team WashU's entry for the 2017 Solar Decathlon. The solar-powered, 995-square-foot residence is built almost entirely from pre-cast concrete. The project marks a significant step in bridging research and practice in collaboration with many academic and industry partners. This year's competition will take place October 5-15 in Denver. After the competition, CRETE House will be permanently installed at the university's <u>Tyson Research Center</u> as a residence for visiting scientists.

Student Support Services

Academic Advising & Registration

Academic advising for graduate architecture students is managed by the programs manager for the College of Architecture and Graduate School of Architecture & Urban Design. The programs manager serves as the chief academic advisor and works directly with faculty advisors, the registrar's office, and students. Students are assigned a faculty advisor prior to graduate orientation. They first meet with their advisor during orientation to prepare for registration for their first semester of study. Students also meet with their faculty advisors during the dedicated advising period in the weeks leading up to course registration each semester. Students through their program to make sure that they are meeting the requirements for graduation, elective selection, and general academic support. Students may also meet with their faculty advisors at any time during the academic year by appointment.

The school has dedicated advisors for students pursuing dual and joint degrees. These advisors are committed to keeping up-to-date with the dual and joint degree requirements and maintain consistent standards for all of the students pursuing those degrees. Students and advisors may contact the programs manager at any time as a resource. Additionally, students who have unique circumstances or programmatic questions, or who would like to change their academic advisor may work directly with the programs manager. The chair of graduate architecture must sign off on any deviation from the degree requirements or exceptions.

Students may submit an Increased Credit Petition to take more than 17 credits a semester. Additionally, if a student has a need to take a leave of absence from the program due to reasons such as medical or financial circumstances or internship opportunities, they must submit a Leave of Absence petition. Students are allowed to take up to two semesters of leave without having to reapply to the program. In both instances, the petitions are submitted to the chair of graduate architecture for final approval.

The registrar and associate registrar for the Sam Fox School provide students and advisors with updated audit sheets prior to the advising period. The audit sheet is used to identify degree progress and deficiencies. The Registrar's Office also manages the course registration process and final degree audits for graduation. Once authorized, students may self-register for courses through the university's WebSTAC system. Course registration opens for all graduate students on a dedicated day set by the University Registrar, typically in mid-November for spring registration and mid-April for fall and summer registration.

For school registration procedures and information, please click here.

Academic Probation Policy

The <u>Academic Probation Policy</u> was revised in spring 2016 in order to identify poor academic performance earlier and provide timely support intervention. Probation students are required to meet with the Sam Fox School registrar and chair of graduate architecture at the beginning of the probation semester to establish expectations and, at midterm, to review progress in all courses.

Faculty are encouraged to submit midterm grades through the WebFAC system for all students but are required to submit midterm grades for students on academic probation. Faculty are also required to prepare midterm warning letters for all students who are at risk of failing their course at midterm. These letters are provided to the student, the programs manager, and the chair of graduate architecture for follow-up as necessary.

Student Health Services and Resources

Students have access to the university's <u>Habif Health and Wellness Center</u>, located on campus. In addition to general health services such as the evaluation and treatment of illness or injury, preventative health care, and health education, students can take advantage of Mental Health Services and Health Promotion & Wellness resources. Mental Health Services is staffed with licensed psychologists, psychiatrists, clinical social workers, and professional counselors. They provide confidential services to assist with challenges such as finances, stress, and social support, among others.

The Health Promotion & Wellness program offers services and events to help with physical and mental health to aid students in reaching their full potential in academics, outside the classroom, and beyond the university. They cover topics such as stress, anxiety, sleep, nutrition, time management, and sexual health, among others.

Incoming Graduate Student Orientation

All incoming graduate students are highly encouraged to participate in an extensive two-week orientation preceding the first day of classes. The orientation introduces students to the university context, its administration, and the local environment of St. Louis. It also introduces students to the school's support and advising services and its physical facilities, including a shop orientation, library tour, and overviews of instructional technology services, digital fabrication capabilities, and studio policies and expectations. Additionally, students participate in sessions devoted to campus safety, dual and joint degree opportunities, socially engaged practice, career services, academic integrity, Writing Center resources, and sexual harassment. The Graduate Architecture Council is actively involved in helping students become familiar with the school, its resources, and its services, all while promoting social interaction between students, faculty, and staff. For international students, additional workshops are available related to English Language Support testing and cultural adaptation.

Career Services

In addition to Washington University's main Career Center, the Sam Fox School has its own <u>Career</u> <u>Services</u> office dedicated to assisting students and alumni in developing the necessary skills for career and internship placement and success. The Career Services office includes the assistant director in career development for architecture and a career specialist for architecture. These career advisors guide students and alumni through specialized programs, help structure career searches, and provide the tools needed to reach the best prospects for internships, residencies, fellowships, graduate schools, jobs, and other professional placements. They also help make connections with the school's extensive network of alumni working throughout the world. The Career Services office offers a wide range of resources and activities, include one-on-one advising, workshops, panel discussions, search teams, Road Shows, and internship and job fairs.

Architect Licensing Advisor

Our architect licensing advisor is Chandler Ahrens, AIA, NCARB. Ahrens obtained his architectural license in 2000 and became an assistant professor in the College of Architecture and Graduate School of Architecture & Urban Design in 2012. He teaches the A46 ARCH 439 Environmental Systems II course, fabrication seminars, and a combination of undergraduate and graduate design studios. He is also a founding partner of Open Source Architecture. Prior to joining Washington University, Ahrens worked for

15 years in architectural firms, including most recently as a senior project designer at Morphosis Architects. He maintains his registration, including annual requirements for professional development and continuing education. He also attends the National Council of Architectural Registration Boards Licensing Advisors Summit. Each academic year, Ahrens works with the Graduate Architecture Council to host a dedicated session about the Architectural Experience Program and path to licensure.

EEO/AA for Faculty, Staff, and Students

The Human Resources Office at Washington University in St. Louis has established an "<u>Equal</u> <u>Opportunity Affirmative Action Policy</u>."

A <u>memo</u> to all Washington University employees from Chancellor Mark S. Wrighton was sent on May 15, 2015, to reaffirm the university's commitment to equal employment opportunity and affirmative action, to define the terms of the university's policies regarding these initiatives, and to outline responsibility and implementation of these policies.

I.2.2 PHYSICAL RESOURCES

Physical Facilities, General Descriptions

For plans and images of our physical resources, please click here.

Current Sam Fox School Campus

The Sam Fox School campus currently consists of five buildings on the Danforth Campus, which incorporate nearly 138,000 square feet for studio-centered architecture, art, and design education composed around a series of public courtyards, foyers, galleries, and lecture halls. The school is further centered around shared facilities for information resources (including the Kenneth and Nancy Kranzberg Art & Architecture Library) and digital technologies and machine fabrication workshops. The Mildred Lane Kemper Art Museum, part of the Sam Fox School, is internationally recognized for its award-winning publications and curatorial programs; its exhibitions focus on contemporary and historical art, architecture, and design. The Sam Fox School campus buildings are linked above ground and underground through connecting porticos, walkways, glassed stair-towers, and corridors. Between 2001 and 2007, \$60 million was committed to the renovation of the three existing art and architecture buildings (Givens Hall, Steinberg Hall, and Bixby Hall) and to the construction of two new Sam Fox School facilities (Walker Hall and the Kemper Art Museum). In addition, three annex buildings—Forsyth House, the Lewis Center, and 621 North Skinker—further expand the available space in the school.

Givens Hall

Joseph B. Givens Hall, a modernized Beaux-Arts building, has housed architecture's programs since 1932. It was renovated in 2001 and continues to serve as architecture's central building for studios, seminars, administrative offices, and faculty offices. The Beaux-Arts design has at its heart a grand central stair, often used for socializing and informal meetings. Faculty offices adjoin the central stair landings on all levels. Givens 1E includes the Sam Fox School Dean's Office suite, as well as offices for the director of architecture, the director of art, and architecture faculty chairs. In total, twenty architecture faculty are housed in Givens Hall in ten private and semi-private offices. Givens 1W organizes digitally equipped Kemp Auditorium (a 90-seat lecture hall) and four digitally equipped 20- to 40-seat seminar rooms; the seminar rooms also serve as pin-up and review space on studio days, and are used for midterm and final reviews.

Givens Hall houses two full-floor design studio spaces, each nearly 10,000 square feet: Givens 2W-2E, with 20-foot ceilings and large windows, and Givens 3W-3E, which features more intimate, skylit ateliers. Students are organized by studio groups, with each student provided with an individual, L-configured workstation. The studios are hard-wired and networked, but the entire Sam Fox School is a wireless community, as well. Graduate students are required to purchase their own computer that meets the school's minimum specifications; printers are provided directly on studio levels, with plotters situated in the Whitaker Learning Lab. Wood and metal machine workshops are located in the lower level of Givens Hall and provide students with a wide range of power and hand tools. Adjacent to the machine shops, the

digital fabrication labs in Givens Hall house laser cutters, milling machines, and 3-D printer technology for use by advanced students in studios and digital media courses, and feature an ever-increasing inventory of digitally controlled equipment.

Steinberg Hall

Mark C. Steinberg Hall is linked to Givens Hall to the east. Completed in 1960, the building was the first commission of Fumihiko Maki, then an architecture professor at Washington University; it was renovated in 2007. Steinberg Hall's first floor contains many of the school's public amenities: Steinberg Hall Gallery, a prime architecture pin-up and student exhibition space; the 300-seat Steinberg Auditorium (used for lecture classes, including in architecture, and the Public Lecture Series); and Etta's Café, which provides weekday food service to the Sam Fox School community. Steinberg Hall's second level provides architecture with additional graduate program studio space (40 desks), adjacent informal pin-up/review spaces, two digital instruction classrooms (with plotters), a seminar/conference room, and office space for three architecture faculty. The second floor is also partly occupied by art majors studying communication design. The lower level of Steinberg Hall includes the school's Career Services office, studio spaces, classrooms, laboratory facilities, a small exhibition gallery, and offices for the College of Art faculty in communication design and photography.

William K. Bixby Hall & Walker Hall

Bixby Hall is linked to Steinberg Hall to the east. Completed in 1926, the Beaux-Arts building primarily serves the College of Art, although it does include some studio spaces for architecture students. The building features teaching and studio spaces, the Dubinsky Printmaking Studio, offices for faculty in fashion design and printmaking. The lower level of Bixby Hall houses an administrative suite that includes the Registrar's Office and the Financial Services Office. Bixby Hall was renovated in 2001.

Earl E. and Myrtle E. Walker Hall

Walker Hall, linked to Bixby Hall to the north by a covered walkway, was designed by Fumihiko Maki and built in 2006. The three-story building houses studio spaces and facilities primarily for painting and sculpture students, including a wood shop, a metal shop, an installation room, a faculty office, and the Nancy Spirtas Kranzberg Book Studio. School facilities are open to all students with permission and proper training.

Mildred Lane Kemper Art Museum

The Mildred Lane Kemper Art Museum building is the centerpiece of Fumihiko Maki's 2006 redesign for the Sam Fox School campus. The museum's foyer provides access to two large changing exhibition galleries on the main level and, by stair and elevator, to the museum's permanent collection galleries on the second level. Museum staff offices and faculty offices for the Department of Art History & Archaeology in Arts & Sciences are also located on the second floor. The lower level houses the Newman Money museum, featuring items from the collection of Eric P. Newman.

In addition to the exhibition galleries, the museum building is home to two significant resources areas for architecture programs:

Kenneth and Nancy Kranzberg Art & Architecture Library

In 1960, the library collections of architecture and art were merged and housed together in Steinberg Hall. In summer 2006, the collections were moved to the new Kenneth and Nancy Kranzberg Art & Architecture Library on the lower level of the Kemper Art Museum. As described in Section 1.2.4, the Library's collection includes more than 119,000 volumes in all formats. The Kranzberg Art & Architecture Library is accessible from the main entrance of the museum and through underground corridors linking Givens and Steinberg Halls and the museum.

Whitaker Learning Lab/ Digital Technologies Resources/Fabrication Workshops

The Sam Fox School is a wireless communication community that encourages the flexible use of laptops to facilitate digital media-based education. The Whitaker Learning Lab, located on the lower level of the Kemper Art Museum, features scanning, printing, and plotting equipment available to all students in architecture and art, as well as digitally enhanced classroom spaces for high-end representation teaching

needs. For more information about our technology resources, please click here.

Annex Facilities

The Forsyth House is a converted residential property across from Bixby Hall on Forsyth Boulevard. The building houses private and semi-private offices for thirteen architecture faculty, two classroom/seminar spaces, and a textile workshop. The Lewis Center is a historic building located approximately one mile from the Danforth Campus in University City; it has been owned and maintained by the University since 1998. The Sam Fox School operates approximately 25,000 net square feet in the building, which is also shared with university property management offices. Primary facilities in the Lewis Center include individual studio spaces for graduate art students, a digital media lab, shop and computing facilities, and faculty/administrative offices. Three landscape architecture studios are also currently located at the Lewis Center. The school maintains space for its Office for Socially Engaged Practice in the 621 N. Skinker building, also in University City. Owned and operated by the university, the building provides office space, seminar space, and work space for socially engaged studios. Most recently, the architecture studio for Solar Decathlon has operated out of the 621 N. Skinker building. Each of these facilities is maintained by the university and offers safety features such as card access, security cameras, and University Police patrolling.

Facilities Operations (Services, Issues, and Planning) Physical Facilities (Proposed/In Planning)

In its 2008 strategic planning process, the Sam Fox School identified the need for an additional academic building to fully meet demand for instruction, studio space, and administration. The need grew more acute as the School saw a rapid increase in its graduate programs, which more than doubled in size between 2006 and 2016. During that timeframe, the School also launched new degree programs, including a Master of Landscape Architecture and a Doctor of Sustainable Urbanism, which have increased the need for studios and faculty office space.

To fully understand its needs, the Sam Fox School engaged in a space study in 2009-2010 conducted by the firm Ayers Saint Gross. Their process helped identify specific program needs across the school and proposed a final location for a new building to best complement the existing Sam Fox School campus. Shortly thereafter, Washington University determined that the timing was optimal to undertake a major renovation of the east end of the Danforth Campus which includes the Sam Fox School. A new plan, developed by the university in collaboration with Michael Vergason Landscape Architects, emerged to eliminate street-level parking and replace nearly 1,000 surface parking spots with an underground garage and a new, more pedestrian- and bike-friendly campus green. The comprehensive east end transformation plan, unveiled in 2015, includes the following elements:

Anabeth and John Weil Hall, which will house graduate art and architecture programs and interdisciplinary Sam Fox School resources, including advanced digital fabrication and technology spaces.

Henry A. and Elvira H. Jubel Hall, which will house the Department of Mechanical Engineering & Material Science in the School of Engineering & Applied Science.

James M. McKelvey, Sr. Hall, which will house the Department of Computer Science & Engineering in the School of Engineering & Applied Science.

Gary M. Sumers Welcome Center, which will house Undergraduate Admissions and Student Financial Services.

Craig and Nancy Schnuck Pavilion, which will bring together a range of dining options, academic programs (including Environmental Studies), the Office of Sustainability, and resources for pedestrian and bicycle commuters.

Mildred Lane Kemper Art Museum expansion, which will add a striking new façade and entrance lobby, as well as a new state-of-the-art exhibition space.

Ann and Andrew Tisch Park, which will connect the new east end buildings to each other, provide a welcoming new university entrance, and offer enhanced gree spaces.

Underground Garage, which will provide 790 parking spaces in a light-infused, comfortable setting.

Construction on the project began in May 2017 and will be completed for the majority of the elements of the project by fall of 2019 (McKelvey Hall is expected to be completed in 2020). The Sam Fox School will significantly benefit from the east end transformation and will enjoy enhanced spaces as a result of these major projects:

Anabeth and John Weil Hall

Weil Hall will be a symbol of Washington University's commitment to creativity in the 21st century and identify the Sam Fox School as a leader in design practice and education. This 82,130-gross-square-foot building will be the new front door to the school and express the important roles for art and architecture in a research university. With a beautifully crafted and contemporary design, Weil Hall will be an inspiring place for advanced scholarship, creative activity, innovative research, and bold experimentation. The building's façade will complement existing Sam Fox School buildings with a combination of limestone and glass accentuated with aluminum fins that will add vertical detailing and solar shading. Architects KieranTimberlake designed Weil Hall in partnership with a Sam Fox School working group consisting of the dean, directors, and program chairs; the building was designed with a minimum LEED Gold goal. Primary spaces in Weil Hall include the following:

Weil Hall Commons and Project Space: This 2,000-square-foot entry hall will be a flexible hub for the entire Sam Fox School, accommodating public events, exhibitions, critiques, and socializing. Hallmarks of this inviting space include an open central staircase, comfortable furnishings, and a glass-framed view overlooking the new east end campus landscape. A large-scale project wall, accommodating murals and digital screens, will create a special environment for ideas, connection, celebration, and inspiration.

Digital Fabrication Lab & Assembly Space: This 3,000-square-foot central space will be both the physical and conceptual heart of Weil Hall. Here, students and faculty can execute complex projects using state-of-the-art tools like the CNC mill, laser cutters, and 3-D printers. A large, open work space with movable work tables connects to the outdoor working court through an oversized door.

Experimental Studio (future build out): This 2,600-square-foot lower-level space, which can be accommodated in shell space, will be a home for video, film, and time-based media production. A large black box space—designed specifically for immersive, multi-screen projections and live performance—will accommodate up to 100 people for public events. An additional screening room, seminar space, editing booths, and control room will provide all the technological tools necessary for groundbreaking work.

MArch, MLA, & MUD Studios: These open-concept studios will accommodate 144 graduate students on the north side of the second and third floors. They will flank a central, enclosed court, allowing natural light to suffuse the space while facilitating connections across disciplines. Studios will also feature group worktables and multiple pin-up and critique spaces to better facilitate collaboration.

MFA Studios: Across the south side of Weil Hall's second and third floors, 30 individual, 180-square-foot studios will support graduate art students' work across media while providing direct access to the facilities in Walker and Bixby Halls, plus the resources of the Kemper Art Museum and Kenneth and Nancy Kranzberg Art & Architecture Library. Installation spaces throughout the studios will allow students to convene for critiques, student-curated exhibitions, and impromptu gatherings.

Kuehner Family Court: This 2,000-square-foot glass-covered court in the center of Weil Hall will create a luminous, two-story expanse between the second and third floors, visually connecting the graduate studios across disciplines. The space will provide a creative, contemplative, and social atmosphere to be used as informal shared work space for full-time and visiting faculty, staff, and students. Comfortable, flexible furnishing will ensure that the space will also allow for special events, collaborative teamwork, and opportunities for gatherings among students, colleagues, and guests.

Roxanne H. Frank Design Studio: This 2,600-square-foot studio space will be the center of design activity in Weil Hall. The flexible and open space will accommodate 30-50 students with work space, pinup/critique areas, and a printing hub. Overlooking Weil Hall's west garden, this studio will be a place for innovative work in communication design, digital design, human-centered design, design thinking, and data visualization. **Florence Steinberg Weil Sculpture Garden:** The Kemper Art Museum's collection of outdoor sculpture will be relocated to a beautiful garden setting to the north of Weil Hall, carefully planned to engage visitors along a visual route from the new Gary M. Sumers Welcome Center to the Kemper Art Museum's entrance. Highlights of the Steinberg Weil Sculpture Garden include works by Alexander Calder, Auguste Rodin, and Pierre-Auguest Renoir.

Dean's Suite and Faculty Offices: A ground-floor suite for the dean of the Sam Fox School will accommodate administrative staff for the graduate programs as well as a conference room, collaborative work space, and kitchen. In addition, five offices for graduate program chairs will be spread across the second and third floors adjacent to studios.

Additional spaces in Weil Hall include three seminar rooms, pin-up and review spaces, and art installation spaces. When it opens, Weil Hall will contain 11,000-square-feet of shell space for future development.

Mildred Lane Kemper Art Museum Expansion

Also designed by KieranTimberlake, an expansion on the north side of the Kemper Art Museum will create an iconic new façade composed of 30-foot-tall pleated stainless steel panels that will reflect the surrounding landscape, sky, and buildings. The rest of the expansion will be built of limestone and glass, echoing the materials of the existing structure and integrating it into the surrounding environment. The new entrance—at ground level and oriented toward the university's front lawn—will enhance accessibility with a more prominent and expanded entry lobby. This welcoming, light-filled room will provide additional space for an array of the museum's renowned programs, including lectures, panel discussions, and performances.

The new James M. Kemper Gallery will be a state-of-the-art 2,700-square-foot exhibition space that will allow the museum to showcase a larger portion of its world-class collection. Currently, only a very small percentage of the Kemper Art Museum's holdings—particularly strong in 19th-, 20th-, and 21st-century European and American paintings, sculptures, prints, installations, and photographs—can be displayed. The addition of the James M. Kemper Gallery will not only give visitors the chance to experience a greater number of the museum's artworks, it will expand curatorial opportunities, enhance the museum's stimulating temporary exhibition program, and support the museum's ability to provide excellence in art historical scholarship, education, and exhibition.

Faculty Physical Resources

The Sam Fox School is now engaged in a comprehensive backfill process to plan for the use of space across buildings after the completion of Weil Hall and the Kemper Art Museum expansion. One key area of focus is faculty offices; historically, this has been a strained resource within architecture. The school has drafted a set of ideal criteria that will prioritize private offices for administrative leaders and history/theory scholars; private or semi-private offices for tenured faculty; semi-private faculty offices for tenure-track faculty; permanent desks for all full-time faculty; and appropriate work spaces for part-time faculty. Architects KieranTimberlake are currently working on a solution that will allow for appropriate space for faculty to complete administrative work, student consultation, and research.

Currently, all full-time faculty are provided an office space in the Sam Fox School complex or annex buildings and are supplied with a laptop computer. While some offices may be more crowded than ideal, effort has been made to pair faculty in ways that ensure the most productive work spaces. These offices are typically accommodating for student advising; however, when an office space may not be appropriate, the school offers several conference rooms that may be used for one-on-one student conversations. A web-based room scheduling system launched in August 2017, which provides greater flexibility for faculty to reserve their own rooms for student meetings—a process that was not possible in the past. The room scheduling system also allows the school to carefully track its use of classroom and instructional space. The school currently is able to maintain its instructional schedule using the Sam Fox School classrooms and seminar rooms, as well as occasional pooled classrooms across the University. The completion of Weil Hall should ensure that most classes can be accommodated within the Sam Fox School campus. Sam Fox School classrooms are outfitted with appropriate audiovisual systems, regularly maintained by the school's IT staff. A plan for regularly updating and replacing these systems has been created to ensure that resources remain current and in line with contemporary teaching methods.

I.2.3 FINANCIAL RESOURCES

The Sam Fox School operates as a single financial unit under the administrative oversight of the dean. There are numerous school-wide resources that benefit the graduate architecture program, including centralized Sam Fox School staff for student services, communications, administration, and business services; a Sam Fox School Research and Technology Office; an Office for Socially Engaged Practice; digital fabrication and shop resources; and an on-site career center with dedicated staff in architecture. The Sam Fox School's central operating budget also funds programs and capital expenditures such as the school's instructional technology and academic facilities. Funds to support the school's central administration are contributed equally by the art and architecture programs. The Kemper Art Museum, funded largely by the university's central fiscal unit, is another significant resource that benefits the graduate architecture program with a distinguished collection of objects and a program of faculty-curated exhibitions related to architecture.

The College of Architecture and Graduate School of Architecture & Urban Design revenue budget includes tuition, endowments, and annual gifts and is heavily tuition dependent. The expense budget is based on instructional need and other critical functions and activities in the school. The director works with the dean and the associate dean for finance to determine allocations for faculty salaries and financial aid -- the largest expenses for the school. Budget lines for specific activities, such as publication projects, final reviews, and visiting faculty, are distributed each year through a process that considers strategic priorities and prior spending as well as new requests from the director, enrollment projections, and programmatic goals.

The expense categories over which the College of Architecture and Graduate School of Architecture & Urban Design has control or influence include the following:

Salaries and fringes for faculty, staff, and students: The director recommends annual merit and salary increases for faculty and staff to the dean and consults with the dean on salaries for new hires.

Financial aid: The associate dean for finance presents a model for financial aid based on enrollment forecasts as well as the budgeted tuition-to-remission percentage. That percentage is determined in consultation with the dean and seeks to allow as much aid as possible within existing budget restraints. The financial aid model is developed in consideration of financial commitments to returning students; forecasted resources from endowed and annual scholarships gifts; the distribution of international and domestic students; and a priority of maximizing support and minimizing debt.

Graduate tuition exchange between schools: Graduate coursework within full-time programs is covered financially in a free-trade agreement among the schools at the University. However, coursework in evening and part-time programs requires payment either from the school or from the student as determined by school policy. The school routinely covers costs for ESL coursework in University College and courses in the Master of Construction Management program housed in Engineering.

Controllable expenses: The director maintains a number of activity-based funds that support the lecture series, travel, publications, programs abroad, student activities, faculty development, new technologies, guest studio reviewers, faculty searches, teaching activities, exhibitions, symposia and conferences, and summer programs, among other expenses. The lectures series is funded primarily by endowed funds designated by the dean of the Sam Fox School.

The income categories over which the College of Architecture and Graduate School of Architecture & Urban Design has control or influence include the following:

Gross tuition and fees: The director works with the dean and the associate dean for finance to recommend a tuition increase each year to the Board of Trustees. Tuition for graduate architecture has increased more slowly than the average University rate over the last several years in an effort to ensure that tuition costs are in line with peer programs nationally.

Endowment income: Donor established endowments allow for restricted use of funds to support a wide range of activities, including scholarships, visiting lectures, study abroad, faculty creative research grants, career services, museum and gallery exhibitions, etc.

Gifts: The director has some discretion over unrestricted gifts made specifically to the College of Architecture and Graduate School of Architecture & Urban Design.

Additional income categories: The school raises additional funds through grants and contracts and educational programs such as its summer architecture institute for high school students.

Scholarships, Fellowships, and Grant Funds

The Sam Fox School awards scholarships for both merit and need as part of a substantial commitment to financial aid for graduate architecture students. In FY16 the school awarded \$6.63 million to 324 students in graduate architecture programs (95% of students) with an average domestic scholarship package of \$22,792 and an average international package of \$19,014. In FY16, the school awarded named endowed scholarships, named annual scholarships, and university scholarships totaling \$374,781 to graduate architecture students; the school contributed an additional \$6,260,434 from operations to graduate architecture financial aid. As part of the school's current *Leading Together* fundraising campaign, a top priority has been identified to raise additional donor-supported funds for architecture for a more balanced ratio between donor-supported and operations-supported aid. To date, the school has raised more than \$20M towards scholarships as part of the campaign.

Notable Graduate School of Architecture & Urban Design scholarships include the following:

Sam Fox School Full-Tuition Award: Each year, the Graduate Admissions Committee selects one member of the incoming class in each program (MArch, MLA, MUD) as the recipient of a full-tuition scholarship for the duration of their degree program. Selection is made on the basis of academic record, strength of portfolio, and professional promise.

Danforth Scholars Program: Each year, the Graduate Admissions Committee selects one member of the incoming class to participate in the University's Danforth Scholars Program. This is a merit-based award, recognizing potential for University contributions and early professional promise among a University-wide selection of scholars. The award is equal to 75 percent of tuition.

Asian Scholarship Fund: Merit-based scholarships are available for selected graduate students applying from Cambodia, China, Hong Kong, Japan, Korea, Philippines, Singapore, Taiwan, Thailand, and Vietnam.

The Chancellor's Graduate Fellowship: Full tuition scholarships and a community of support are awarded to outstanding and diverse students interested in careers as college or university professors.

Mr. and Mrs. Spencer T. Olin Fellowships for Women: Renewable awards covering the cost of tuition for graduate study by women are available in a number of fields, including architecture.

McDonnell International Scholars Academy: The McDonnell Academy seeks to develop a cohort of future leaders in a global university system and promote global awareness and social responsibility. Generous financial awards are made selected scholars. To be eligible to apply, an individual must be a graduate of one of the McDonnell Academy's international university partners and must be admitted to a doctoral or master's degree program at Washington University.

In addition to scholarships, graduate architecture students are eligible for teaching assistantships, but these assistantships are not guaranteed. Students apply for assistantships after they have arrived on campus. Typically, teaching assistants are selected from graduate students who have been in the school for at least one semester and have done well academically.

Each year, the Sam Fox School offers funding opportunities to both faculty and graduate students.

Creative Activity & Research Grants: Sam Fox School tenured and tenure-track faculty as well as senior lecturers are eligible to apply for individual grants ranging from \$1,000-\$8,000. The grants allow faculty to pursue innovative new projects or to advance ongoing creative activity and research. Typically, the dean awards \$25,000-\$30,000 each year using a jury of peers to review grants and make awards.

Faculty Development Teaching Grants: All Sam Fox School tenured and tenure-track faculty are eligible to apply for Faculty Development Teaching Grants, as well as full-time senior lecturers, lecturers, and visiting faculty who have taught at the school for at least one year prior to applying. These awards

are intended to recognize stellar contributions in teaching, to support innovation, and to incentivize activities that further enrich the school through student instruction. Up to four Faculty Teaching Development Grants are awarded annually in the amount of \$2,500.

Graduate Student Travel Grants: The Sam Fox School offers competitive travel grants for graduate students in architecture, art, landscape architecture, and urban design. These grants primarily support travel to regional, national, and international conferences and symposia and travel for research and creative activity when accompanied by a strong rationale and thesis statement. All full-time Sam Fox School graduate students in good standing are eligible to apply. Awards of up to \$600 for domestic travel and \$1,000 for international travel are made each semester. On average, the dean awards \$5,000-\$10,000 in grants per year.

Additional grant opportunities are available internally through the Sam Fox School's Office of Socially Engaged Practice and through a wide range of centers and departments throughout the university.

The Sam Fox School has encountered fluctuating enrollment in its Master of Architecture program over the last six years. Despite steadily growing numbers of applications (707 for fall 2015, 809 for fall 2016, and 866 for fall 2017), enrollments have declined. There was an uncharacteristically large enrollment in fall 2015 (134 graduate architecture students), but since that time, the school has not met its 100-student incoming enrollment goal (87 in fall 2016 and 83 in fall 2017). Simultaneously, international enrollment has increased as a percentage of total enrollment. The school values and seeks a global student body, but also realizes the challenges of a smaller domestic population. To address these issues, the school has invested more focused effort and additional resources into recruitment activities, including the addition of a full-time staff recruiter for graduate programs to specifically address domestic recruitment; more resources allotted for faculty recruitment travel; resources to expand the diversity of international applications; and resources for stronger reputation building activities, such as faculty attendance at conferences and symposia, advertising, and alumni engagement.

As enrollment declines, so does tuition revenue, the largest funding source for the graduate architecture program. While the program can offset these declines somewhat in reductions to variable expenses, such as reducing the number of non-tenured visiting lecturers or part-time faculty in a given year, it is difficult to quickly adjust fixed expenses and operational costs, such as permanent faculty, staff, and facilities. The College of Architecture and Graduate School of Architecture & Urban Design seeks to balance enrollment targets moving forward to ensure financial stability with a focus on scale, class size, and program size. The school will seek to optimize space and to address diversity while providing financial support for our students with a close eye on student debt.

As discussed above, the school is responding to reduced tuition income by investing in a more comprehensive approach to domestic recruitment and also looking at additional opportunities to increase interest in the school's programs, including partnerships with Social Work, Public Health, and Engineering; new dual degrees; and new certificate programs. The addition of Weil Hall in 2019 will provide generous new studio spaces for the graduate architecture programs and offer significant new amenities, including a digital fabrication studio, additional review space, and classroom and social space. The new building, as part of a major campus transformation, will serve as an attractive opportunity for prospective students. However, the school's most important investment continues to be in financial aid, which grows each year. Total aid as a percent of tuition was 43.9% in FY12; by FY14 it was 45.4%, and in FY17 it was 47.2%. This effort is critical as accepted students who don't enroll report that cost is the most significant barrier to a graduate architecture degree at Washington University.

The school anticipates few changes in the funding models for overhead, instruction, and faculty salaries. However, there is specific attention being paid to gender equity and adjustments have been made incrementally. The most significant financial factor moving forward will be the addition of Weil Hall. Although the school will not owe debt on the building, there will be a significant additional operating expense, \$1 million+ each year. The school has reserves saved (\$6.7 million total in FY17) to help offset the increase in the short term and is developing longer-term strategies across the entire school to increase income, including teaching classes to more non-major undergraduate students, developing niche graduate programs that build on unique faculty and University resources, and building stronger partnerships with corporate and foundation partners.

The school is well supported by the university's Central Fiscal Unit and the Provost's office, which are in regular discussion with the dean and associate dean for finance to ensure the school's success. The Office of the Chancellor and the Board of Trustees have consistently provided financial support from gifts and endowments to meet the ambitious goals of the Sam Fox School including the current construction of Weil Hall and the expansion of the Kemper Art Museum. The Chancellor is also committed to providing a new endowed professorship for the Director of Architecture within the coming year.

The Sam Fox School is engaged in a multi-year fundraising campaign, *Leading Together*, as part of a \$2.2 billion university-wide effort. The individual Sam Fox School goal is \$75 million with the following top priorities: \$20 million for scholarships; \$15 million for academic programs; \$10 million for endowed faculty and research support; and \$30 million for facilities. The school has raised more than \$71 million to date and will continue to work to reach and exceed these goals by the end of the campaign in June 2018.

I.2.4 INFORMATION RESOURCES

Institutional Context and Administrative Structure of the Library and Visual Resources

The <u>Kenneth and Nancy Kranzberg Art & Architecture Library</u> is one of the Washington University Libraries. The Art & Architecture librarian serves in an administrative capacity as head of the Art & Architecture Library and reports to the associate university librarian for collections. Responsibilities include leading the Art & Architecture Library staff team in planning, designing, and directing effective services for faculty, students, and staff of the Sam Fox School of Design & Visual Arts and the Department of Art History and Archaeology in the College of Arts & Sciences. The subject librarian for Art & Architecture is responsible for the architecture program within the WU Libraries and reports to the Art & Architecture librarian.

The Art & Architecture librarian and the subject librarian for Art & Architecture have professional degrees in librarianship and the Art & Architecture librarian holds a graduate degree in art history. Librarians at Washington University are considered administrative staff. The librarians have management responsibility for the acquisitions budget and the student-hiring budget. Each year, the librarian has opportunities to request needed equipment and physical improvements; these are funded in competition with other library units.

The two library associate positions of student supervisor and collections manager require a bachelor's degree or equivalent experience and three years of library public service experience. All positions have written descriptions. The Art & Architecture Library, with four full-time personnel, approaches the staffing of comparable institutions. Part-time student assistance provides routine library service, particularly during evening and weekend hours.

The Visual Resources Center is housed adjacent to the Art & Architecture Library and is dedicated to providing support for visual teaching and learning. It is primarily funded and directed by the Department of Art History and Archaeology, with additional funding from the Sam Fox School for special projects. The Visual Resources curator, who reports to the chair of the Department of Art History and Archaeology, staffs the Center. There is also a full-time assistant curator of Visual Resources and student workers supervised by the curator.

Library and Visual Resources Collections, Services, Staff, Facilities, and Equipment

Content, extent, and formats represented in the current collection include number of titles and subject areas represented.

	2017	2010-11	2008-09	2006-07
Total of All Volumes in the Art & Architecture Library West Campus Art and Architecture Collection	119,214	109,114	105,891	103,814
Total of Volumes that have Library of Congress (Architecture) Classification	29,988	27,306	N/A	25,303
Art & Architecture Library Print and Electronic Journal Subscriptions	153	192	320	N/A
University Libraries Online Database Subscriptions	931	269	242	184
Total of Architecture Videos and DVDs	210	179	N/A	176

Art & Architecture Library Collection Numbers

Its valuable print holdings and the access it provides to all the major art and architecture databases make the Art & Architecture Library the best of its kind in the region. The Library holds over 119,000 art and architecture volumes in various media including over 900 videos and DVDs, and almost 1,600 journal titles, and subscribes to the foremost electronic article indexes, e-book reference works, and digital image databases as well as less known specialized electronic resources that support the research needs of faculty. The digital image databases deliver a critical mass of visual images for teaching and learning to all faculty and students. Through the University Libraries, Art & Architecture Library users have access to over 900 online databases to support interdisciplinary research. The Art & Architecture Library website helps users quickly find print and electronic resources and gives tips for searching effectively. The collections and access are planned to serve the needs of undergraduate and graduate students and faculty of the Sam Fox School and the Department of Art History and Archaeology.

Collection development is very much based on current programs and on the needs of students and faculty. Faculty and students may suggest purchases in person, through e-mail, or by filling out a form on the library's website. Subject librarians attend departmental and staff meetings to remain in close communication with faculty and to stay up-to-date on new areas of research and teaching.

First priority for ordering new materials are requests for new and retrospective materials to support course offerings and faculty research areas. Faculty actively participate in collection development by identifying areas of the collection where growth is needed. Areas of focused collection development include non-western art and architecture, modern and contemporary art and design, and landscape and urban design. The collection aims to support all of the curriculum areas of contemporary practice (including urban issues and landscape architecture), technology and sustainability (or the environment), history/theory, and computation and representation as they are emphasized by the school's and departments' programs.

The library will purchase any materials that are needed to support programs and research. Using the North American Collections Inventory Project format to describe collection strengths based on classification, for architecture, intended "collecting intensity" ranges from "basic information level" (mainly for architecture of specific countries of lesser interest to the program) to "instructional support level— advanced" which support study at the graduate level. These assignments are appropriate based on the programs of the Graduate School of Architecture & Urban Design. Due to the age of the collection (established in 1905) and some valuable gifts over the years, retrospective holdings are good.

The library actively supports faculty research in areas related to architecture. This is done based on current, individual faculty activities (as opposed to any attempt on the library's part to provide universal coverage or anticipate future needs). Students and faculty also benefit from the library's broad scope beyond architecture. Collections that support graduate and undergraduate programs in Art History and Studio Arts are heavily used by those in Architecture, giving a broader exposure and a more

interdisciplinary experience. Art Special Collections is a 3,600-volume collection of rare and unique art and design printed materials located at the Art & Architecture Library. Art and design students have access to these primary sources as part of their curriculum through classroom visits to use special collections materials in the library's seminar room. This collection continues to grow based upon the teaching and research needs of Sam Fox School faculty. In addition, separate libraries on campus in Business, Social Work, Earth and Planetary Sciences, East Asia, Law, and Medicine provide strong support for scholarly work and study at the Sam Fox School.

Evaluation

Librarians work with faculty to integrate the teaching of research skills in curriculum and assignments. During orientation week, the librarians meet with a majority of the incoming art and architecture graduate students. Throughout the semester, in-depth research instruction tailored to specific courses is offered in the Art & Architecture Library's seminar room or in a classroom in an adjacent building. Together, librarians and faculty develop sequential research process assignments that build research and critical thinking skills; plan hands-on sessions where students apply the skills with the help of faculty, librarians, and teaching assistants; and create web guides pointing students to library resources to use in completing research assignments.

Undergraduate architecture students at Washington University acquire basic research and critical thinking skills in a required freshman-year general-education College Writing course. Knowing that students have already acquired these basic skills allows faculty and librarians to emphasize the next, intermediate competency level of discipline- specific skill sets with students in the architectural history courses.

Some additional points at which students in the architecture program are taught research and critical thinking skills include the new graduate student orientation; an in-depth research session for new international graduate students; and the Library Research Guide for Architecture including the graduate Degree Project course.

The Art & Architecture librarians promote how they support the research and teaching needs of faculty and graduate students through a variety of services. Services include assistance with research, library instruction, copyright issues, and technical support. Research service by the subject librarian is provided onsite for the MFA students at the Lewis Center one afternoon per week during the academic year. Subject librarians are responsible for maintaining current research guides in the areas of architecture, art history, and studio arts. The subject librarians also create course-specific research guides to support classroom instruction. All faculty and students can expect expert reference service at their point of need, whether in person, or through email or live chat. In addition, library associates provide basic assistance in finding and using information in the Art & Architecture Library.

Since 2004, the libraries have developed and administered a tool called the Service Quality Survey to survey faculty and students on library service quality and satisfaction with collections every three years. Regular assessment of library services allows the WU Libraries system to continuously work to meet users' highest service level expectations. In survey results from 2013, faculty and students gave the Art & Architecture Library an overall satisfaction rating of 4.74 on a scale of one to five, where one equals very unsatisfied and five equals very satisfied. In a 2016 survey of only students, the rating was also 4.74.

The Art & Architecture Library is open a total of 75.5 hours per week during the school year. Access to the library's catalog and all other electronic information sources is available through networked computers on site, through the on-campus wireless network, and remotely to faculty and students through the WU Libraries proxy server.

The library provides twice daily paging of materials for the convenience of faculty and students. Information about the holdings of other libraries is also available through electronic access, and these materials can be obtained through interlibrary loan or document delivery services at no cost to the user. Users may request books from other WU libraries to be delivered for pick up at the Art & Architecture Library. As a member of the MOBIUS consortium of Missouri and adjacent states' academic libraries, WU Libraries provides students and faculty quick processing of interlibrary loan requests. The libraries' membership in the multiple consortia partnerships gives Art & Architecture Library users rapid electronic

delivery of articles in electronic format. Students also have on-site and interlibrary loan access to the extensive collection of the Saint Louis Art Museum's library.

WU Libraries offer permanent digital archiving of the theses and dissertations produced by graduate students in other Washington University Schools through the Electronic Theses and Dissertations (ETD) collection. The libraries and the Graduate School of Architecture & Urban Design have plans to implement a procedure in the 2017-18 school year to collect digital files of Architecture graduate students' final design thinking books and their Degree Projects into the ETD system.

Books, videos, and DVDs on course reserve are available on request at the service desk and through Ares, Electronic Reserves. Ares provides faculty the opportunity to place readings on reserve in PDF.

Quality, Currency, Suitability, Range, and Quantity of Resources

The Art & Architecture Library holds 153 current journal subscriptions. Coverage is good for architecture with subscriptions to 87 percent of the titles listed on the *Core List of Architecture Periodicals* as set forth by the Association of Architecture School Librarians (AASL), as well as 36 percent of the titles identified as Supplementary by AASL. Retrospective holdings are good for major titles, with many complete or nearly-complete runs. The Library subscribes to the major Art and Architecture indexes: Art Index, Art Index Retrospective, Art Bibliographies Modern, and Avery Index to Architectural Periodicals. Additionally, the University Libraries support JSTOR and Project Muse, which include electronic holdings in architecture.

The library collects videos and electronic materials; it does not collect drawings, photos, models, or materials samples. Audio-visual materials circulate according to the same policies as books. For materials that do not circulate, the Library maintains a VCR/DVD player and monitor available for individual use as well as players and a projector in the Library's seminar room for group viewing.

The Washington University Libraries have been instrumental in purchasing and implementing two major digital image indexes to which architecture faculty and students have access. The WU Libraries have subscribed to ARTstor since 2004, which currently contains over 450,000 images classified as Architecture and City Planning. In 2003, the digital image management system was implemented on campus to provide a systematic approach to collecting and distributing locally developed digital image collections and is currently managed through ARTstor Shared Shelf. Most notably, the WU Visual Resources Center collection of over 55,000 digital images is available as well as almost 2000 more architectural images from local campus collections. The Visual Resources Center's collection supports teaching and classroom image needs by making digital images available for viewing, downloading, and presentation.

Art & Architecture Library Facilities

In the summer of 2006, the Art & Architecture Library moved from Steinberg Hall (designed by Fumihiko Maki in the early 1960s) to a new 11,360-square-foot space on the ground floor of the Mildred Lane Kemper Art Museum, also designed by Maki. The L-shaped library runs along two sides of the courtyard in the middle of the Sam Fox School complex, conveniently accessible to all departments. The outside walls, almost all windows, bring in natural light. Current issues of journals and new books are displayed next to comfortable reading chairs. Reading room tables are wired for internet access and are designed as open work surfaces, both for small group collaborations and to accommodate oversized art books. The technology supports wired and wireless network access, scanning, including an overhead book scanner, and VHS/DVD viewing. A quiet study room for graduate students seats twenty. A seminar room with digital projector allows librarians to introduce small groups to the library's print and electronic resources. The seminar room is also used for art and architecture critiques and class viewings of videos and DVDs.

The Art & Architecture Library book collections are housed, for maximum capacity, in mobile sections of compact shelving, more than doubling the number of books an area can hold. The library has 9,500 linear feet of shelf space, compared to 5,000 in the previous location. Unfortunately, the shelving is now 93 percent full. Offsite storage offers long-term shelving for lesser-used materials and is almost filled to capacity as well. Roughly forty percent of the library's less-used general and special collections are offsite at the West Campus Library. The off-site facility offers climate-controlled, secure storage, plus daily

delivery service on weekdays. Including off-site facilities, storage and housing systems are appropriate for most materials, although in Service Quality Surveys, faculty and students consistently comment on the difficulty of browsing for books due to the compact shelving.

Funding to Enable Continuous Collection Growth

Acquisitions and Endowment Funding

	2018	2014	2010
Total Art & Architecture Library	\$188,117	\$165,060	\$172,568
Architecture Monographs	\$21,600	\$25,500	\$22,108
Architecture Continuations (Print Journals, Electronic Journals, Databases)	\$24,603	\$21,500	\$19,700
Endowment and Gift Funds	\$28,977	\$32,760	\$53,537

The library's acquisitions policy is both responsive to current teaching and research needs of faculty and students as well as strategic in planning for future growth areas. An approval plan makes possible the acquisition of major art and architecture monographs from American and European publishers. Many other items are identified and selected by the subject librarians. In addition to books and periodicals, videos and digital formats are purchased, and the Library provides access to electronic sources.

The Art & Architecture librarian can lobby for an increase or redistribution of funds, although there is no official role for subject librarians in the budget process. The librarian, who authorizes all expenditures from the acquisitions budgets, makes selection decisions.

The Washington University Libraries are considered to be among several university-wide services. As such, funding for all WU Libraries comes from the payment of prorated funds by the Colleges and Schools within the University into the Central Fiscal Unit. Decisions about how these funds will be distributed are made by the executive vice chancellors and the provost.

The WU Libraries work as efficiently as possible—running a lean organization and making internal reallocations to meet new needs, as well as engaging in fundraising. Currently, gift, endowment, and grant income accounts for twenty percent of the University Libraries budget, with the rest coming from the Schools' prorations. The libraries are identified as one of the major assets of the university and, more generally, there is broad recognition at Washington University that libraries are central to any top-tier research university. However, library resources still lag behind the needs—and ranking—of the university. The University Libraries have been working on closing resource gaps to meet faculty needs.

A faculty library committee, which includes members from the Sam Fox School, is proactively addressing numerous issues. These issues include the rapidly escalating cost of library material, the limits of the current space to house collections, the need to adapt to a more digital environment, and the need to build awareness and emphasis on the development of library resources as new faculty are hired and the university moves into new scholarly and research directions.

I.2.5 ADMINISTRATIVE STRUCTURE & GOVERNANCE

University Structure

Washington University offers degree granting programs in seven schools: Arts & Sciences, Brown School of Social Work, Olin Business School, Sam Fox School of Design & Visual Arts, School of Engineering

and Applied Science, School of Medicine, and School of Law. With the exception of the School of Medicine, the deans of each school report to the Provost, the chief academic officer of the university, who reports to the Chancellor. The Chancellor is appointed by the Board of Trustees. Central Fiscal Unit divisions manage the non-academic operations of the institution including Human Resources, Finance, Alumni & Development, and Facilities. The university is accredited by the Higher Learning Commission (HLC), a commission of the North Central Association.

For a Washington University in St. Louis organizational structure, please click here.

Sam Fox School of Design & Visual Arts Administrative Structure

The Sam Fox School of Design & Visual Arts was formed on July 1, 2006, as a new academic and fiscal unit within the University. The school includes the College of Architecture (undergraduate), the Graduate School of Architecture & Urban Design, the College of Art (undergraduate), the Graduate School of Art, and the Mildred Lane Kemper Art Museum. The School leverages shared staffing and resources across the academic units to achieve a streamlined workflow and economies of scale.

In 2012, a process was initiated to update the Sam Fox School's administrative structure to give more representation to academic program areas and to encourage greater interdisciplinary collaboration. The resulting structure retained the Dean of the Sam Fox School, appointed by the Chancellor, as the school's chief academic and administrative officer. It was determined that the titles "Dean of Art" and "Dean of Architecture," which had originated when the schools were separate entities, would transition upon subsequent appointments to "Director." As such, Professor Heather Woofter assumed the title "Director" on July 1, 2017, following the departure of Dean Bruce Lindsey.

Currently, the directors of Architecture, Art, and the Mildred Lane Kemper Art Museum serve as the academic and administrative officers of their respective units, reporting to the Dean of the Sam Fox School. Directors are appointed by the dean for five-year, renewable terms. The 2012 restructuring also created program chair positions in Graduate Architecture, Landscape Architecture, Urban Design, Undergraduate Architecture, Graduate Art, Studio Art, and Design. The role of the chairs is to oversee operations in their respective program area and to collaborate with fellow chairs to develop and implement strategic initiatives. Chairs are appointed by the respective director in consultation with the dean for three-year, renewable terms.

The Dean of the Sam Fox School manages the school in consultation with a senior leadership team including the directors and chairs and senior Sam Fox School administrative staff:

Associate Dean of Students is responsible for student advising oversight, student support and support staff supervision, and undergraduate recruitment.

Associate Dean for Finance is responsible for budget management and planning; graduate financial aid management; student enrollment planning and projections; hiring and employment administration for faculty, staff, and students; and financial support staff supervision.

Assistant Dean and Registrar is responsible for course registration and student records management, tracking of degree requirements, commencement administration, and supervision of registration support staff.

Assistant Dean, Sam Fox School is responsible for strategic planning, policy development and oversight, staff development and communication, graduate recruitment management, special projects management, and serving as the external relations and capital projects liaison.

Director of Communications is responsible for Sam Fox School, Art, and Architecture communications oversight, web site development and management, and serving as the university communications liaison.

Director, Research and Technology is responsible for faculty research support, funding opportunities research, and grant administration support.

Assistant Director, Office of Socially Engaged Practice is responsible for managing the school's community partnerships, providing faculty and students with support for socially engaged classes and projects, and serving as a liaison for socially engaged university projects.

The school receives additional support from the university for specialized staff resources, including a dedicated team of seven Sam Fox School Alumni and Development staff members and three Career Services staff members.

For a chart of the Sam Fox School administrative structure, please click here.

Sam Fox School - Management and Governance

The Dean of the Sam Fox School meets biweekly with the unit directors for strategic-level management discussions to address administrative, personnel, financial, pedagogical, and curricular issues that cross academic disciplines. Cabinet meetings, including directors and chairs, are scheduled one-to-two times per semester for the purpose of strategic planning. Sam Fox School tenured and tenure-track faculty meetings are scheduled as needed and serve as forums for school-wide curriculum and policy review and votes. Student groups within the school elect leaders that are invited to meet for ad hoc sessions with the dean as needed to address school-wide issues of interest or concern.

Tenure, promotion, and hiring are governed by the "Policy on Faculty Appointment, Retention, Tenure, and Promotion" that standardizes practices across art and architecture. Searches are managed by discipline, but search practices require that one art faculty member sit on architecture searches and vice versa. Tenure and Promotion votes are also managed by discipline, and these votes by the tenured faculty are recorded and reported to the Director of Architecture or Art, who makes a recommendation regarding candidates to the Sam Fox School Dean's Advisory Committee on Tenure and Promotion. The Dean of the Sam Fox School presents candidates who receive positive votes for tenure and/or promotion from the Dean's Advisory Committee to the University's Board of Trustees for a final vote.

The Sam Fox School maintains the following school-level governance and operational committees with members representing the tenured and tenure-track faculty and full-time administrative staff:

- Dean's Advisory Committee on Tenure and Promotion
- Sam Fox School Faculty Council (for policy review and implementation)
- Sam Fox School Committee for Fairness and Diversity
- Sam Fox School Exhibitions Committee
- Mildred Lane Kemper Art Museum Director's Advisory Committee

College and Graduate School of Architecture and Urban Design Administrative Structure

Director of Architecture: The Director of the College of Architecture and Graduate School of Architecture & Urban Design, a full-time, five-year appointment, is responsible for all aspects of the administration of the undergraduate and graduate programs in Architecture, Landscape Architecture, and Urban Design, including the following:

- Ensuring the quality and reputation of the degree programs through strategic oversight;
- Maintaining a healthy, productive, and creative environment for students, faculty, and staff;
- Overseeing overall recruitment efforts;
- Overseeing the budget and the allocation of resources for the undergraduate and graduate programs;
- Evaluating faculty and staff annually and making recommendations to the dean for salary merit increases;
- Initiating searches, recruiting, and making hiring recommendations to the dean;
- Leading the tenure and promotion process including oversight of faculty mentoring;
- Assigning faculty teaching loads, teaching assignments, committee and service assignments, and making recommendations for professional development leave; and
- Representing the school's Architecture programs within the University community, as well as regionally, nationally, and internationally.

The Director of Architecture serves as an ex officio member of the Sam Fox School Dean's Advisory Committee on Tenure and Promotion and as an ex officio member of the University's Buildings and Grounds Committee.

Program Chairs: The chairs of Graduate Architecture, Undergraduate Architecture, Landscape Architecture, and Urban Design are three-year appointments made by the director in consultation with the dean. The chairs provide disciplinary expertise and leadership in guiding the operations of the individual programs and the continuing evolution and refinement of curricula, new degrees, and other new courses of study. The chairs lead recruitment efforts for their programs and assist with enrollment projections. With the director, chairs lead in the development, implementation, and monitoring of learning outcomes and assessment. Chairs assist with making teaching assignment and teaching assistant recommendations and organize and coordinate reviews and guest critics. The chairs work with the director and registrar to ensure academic standards and curriculum requirements are met and coordinate communication with students about academic progress and disciplinary actions. As a broader group across the school, chairs are charged with strategic collaboration between and across programs.

Director of International Programs: The Director of International Programs is appointed by the Director of Architecture and oversees planning and administration for graduate international programs.

College of Architecture and Graduate School of Architecture & Urban Design Governance

The architecture faculty consists of tenured, tenure-track, professor of practice, visiting professor, visiting associate professor, visiting assistant professor, senior lecturer, lecturer, and emeritus faculty appointments. All tenured and tenure-track appointments are full-time. Lecturer appointments may be full-time (teaching 9 credits per semester) or part-time and range from semester-long appointments to two-year appointments. Visiting faculty appointments may be full- or part-time and my last no more than three years total. Professor of practice appointments may be full- or part-time; initial appointments are three years and subsequent appointments may be up to five years and may be renewable indefinitely. Full-time faculty are encouraged and expected to participate in faculty meetings, engage in discussions concerning issues of importance to the school, and serve on committees. All full-time faculty may vote on issues related to curriculum and academic policy; voting on governance matters, including votes on faculty hiring, resides with the tenured and tenure-track faculty. Votes on faculty searches and tenure and promotion are advisory to the director.

The director manages the College of Architecture and Graduate School of Architecture & Urban Design in close collaboration with the chairs; this group meets monthly or more frequently as needed to provide a forum for discussion and decision making regarding curriculum evolution, recruitment, faculty teaching assignments, visiting faculty, space utilization, and the general administration of the academic programs. Other faculty, when appropriate, are invited to participate in chairs' meetings. In addition, the director leads monthly faculty meetings during the academic year for all faculty, which provide a forum for communication, discussion on important matters affecting the school, discussions and votes relating to curricula, and committee reports.

College of Architecture and Graduate School of Architecture & Urban Design Committees

The Director of Architecture makes committee assignments for the academic year. All full-time faculty serve on committees. Students serve on the Curriculum Committee and the Graduate Admissions Committee, and in this capacity, make significant contributions to the development of program and the selection of new students.

Operational Committees

- Tenure and Promotion Committee
- Graduate Admissions Committee
- Graduate Financial Aid Committee
- Undergraduate Scholarship Committee
- Lecture Series Committee
- Exhibitions Committee
- Steedman Competition Committee

Academic Committees

Curriculum Committee

- History/Theory Committee:
- Building Technology Committee
- Digital Technology Committee
- Doctor of Sustainable Urbanism Committee

Ad Hoc Committees and Appointments

- Search Committees
- Learning Culture Committee
- Work Groups/Special Projects Team

Appointments: In addition to committees, faculty and students may serve in the following capacities: Art and Architecture Library liaison, University Graduate Council Representative, Undergraduate Council Representative, Arts & Sciences Representative, Faculty Senate Representative, ACSA Councilor, and Architect Licensing Advisor.

II.1.1 STUDENT PERFORMANCE CRITERIA

Student Performance Criteria Matrices

For a matrix for each of the accredited degree program tracks, please click here.

Pedagogy and Methodology Used to Address Realm C

The graduate Degree Project provides a strong closure to students' advanced study in architectural design studios. Through the Degree Project, all students in their final semester in the professional degree programs have the opportunity to test and challenge their capacity to initiate and develop design proposals and to carry through a design project that they have formulated independently.

This final Degree Project consists of two parts. The first is a preparatory phase in the penultimate semester, during which the students take the class Design Thinking. Through research (C.1 Research), the semester's goal is to establish a conceptual framework for the proposal, to formulate a program, and to select a site. These proposals are reviewed at the end of the semester for thoroughness and feasibility.

The second part consists of a design studio in the student's final semester in which the project considered in Design Thinking is undertaken. Degree Project students address C.1 Research, C.2 Integrated Evaluation and Decision-Making, and C.3 Integrative Design by working under the guidance of designated Degree Project faculty who provide ongoing design criticism during studio hours and establish the review schedule and submittal requirements. In addition, each student acquires two advisors whose expertise is relevant to the proposal and who act as consultants to the project. A final review with invited national and international guest critics evaluates and confirms the student's work.

Each of the studio performance criteria outlined in Realm C is covered in other courses in the curriculum as an introduction to prepare for the Design Thinking and Degree Project sequence.

C.1 Research A46 ARCH 4284 Architectural History II

C.2 Integrated Evaluation and Decision-Making A46 ARCH 439 Environmental Systems II

C.3 Integrative Design A46 ARCH 538C Advanced Building Systems

Additionally, we have a comprehensive studio requirement in our option studio sequence (ARCH 511, 512, or 611 design studios). Each student must take a minimum of one comprehensive studio during their individualized sequence. Comprehensive studios are denoted prior to the studio selection process and approved by the chair of graduate architecture. The comprehensive studio guidelines were formally established in 2016 in an effort to more consistently prepare students for Degree Project. The comprehensive studio design exercise must be a building of sufficient complexity and size to warrant the

inclusion of complex spatial organization, complex structural demand and enclosure, and complex site challenges. The demonstrated ability must be shown by each individual in the studio, and cannot be accomplished in group work or design-build projects.

The comprehensive studio must comply with the following minimum deliverables:

- Clear evidence of each student's ability and competence, shown in mandatory 1/4" = 1'-0" sections, partial plans, and/or elevations illustrating detailed conditions at the roof, wall, intermediate levels (if applicable), ground, and underground points.
- Clear inclusion of structural components in the plans and general sections, cross-coordinated with plans.
- Proper overall dimensioning of structural components shown in the ¹/₄" or ¹/₂" = 1'-0" scale documents.
- Compliance with Building Code(s) regulations regarding fire safety and accessibility.

The ultimate goal of the comprehensive studio is to prepare each student for the Degree Project semester.

Methodology for Assessing Student Work

As outlined in the Graduate School of Architecture & Urban Design's <u>policy</u>, students must complete all required courses with a minimum grade of "C-" or better. For architectural design studios, students must earn a grade of "B-" or better two of the three studios in core design sequence. Students in the Master of Architecture 2+ program must earn a "B-" or better in A46 ARCH 419 Architectural Design III. Additionally, all students must earn a "B-" or better in two of the three studios in the option studio sequence before entering A46 ARCH 616 Degree Project. A grade of "D" or "F" would not count toward degree requirements, and the student must retake the course in the next semester it is available.

Faculty are responsible for assessing student work as "high pass" or "low pass" for their courses. "High pass" work is "A" quality work and exceeds all of the expectations and student performance criteria required by the course. "Low pass" work would be in the range of "B" or "C" quality work that fulfills requirements and student performance criteria for the course.

II.2.1 INSTITUTIONAL ACCREDITATION

Washington University in St. Louis received continued accreditation in 2015, and the next Reaffirmation of Accreditation will be in 2024.

The full letter of accreditation from the Higher Learning Commission can be found here.

II.2.2 PROFESSIONAL DEGREES AND CURRICULUM

NAAB-Accredited Professional Degree Programs

The College of Architecture and Graduate School of Architecture & Urban Design offer three NAABaccredited tracks for a Master of Architecture. The program tracks are as follows:

Master of Architecture – MArch 3 (undergraduate degree in or outside of architecture plus 105 graduate credit hours)

Master of Architecture – MArch 2+ (undergraduate degree including architecture studies plus 75 graduate credit hours)

Master of Architecture - MArch 2

(undergraduate degree in architecture plus 60 graduate credit hours)

The Graduate School of Architecture & Urban Design offers an accredited first professional degree to students with either an undergraduate degree in architectural studies, or an undergraduate degree in

other disciplines. The duration of graduate studies will vary according to prior preparation and course work in architecture, and the quality and complexity of work in an applicant's portfolio. The Graduate School's seven-semester MArch 3 program forms the overall basis for the graduate program. Students with strong backgrounds in architectural studies (a Bachelor of Science in Architecture, typically) are considered for selective entry into the MArch 2 and 2+ programs, curricula of four and five semesters in duration, respectively. The Graduate School reserves the right to place students at the level the Admissions Committee deems appropriate, on the basis of portfolio evaluation, transcript evaluation, and overall preparation for the intensity of the design curriculum.

Students who qualify for placement in the four-semester MArch 2 curriculum begin this sequence with three semesters of advanced design studio and seminar course work, designated by 500- and 600-level design studios. Students who qualify for placement in the five-semester MArch 2+ curriculum will begin with the final core studio (419) focusing on housing design, followed by three semesters of advanced studios and course work. Students enrolled in the MArch 3 curriculum enter the three advanced semesters following satisfactory completion of the three-semester core sequence.

Program Requirements

For each accredited degree program curriculum matrix, please click here.

Minimum and Maximum Load Requirements

The program requirements were established at 15 credits per semester. Students must be registered for a minimum of 12 credits per semester. Students are not permitted to enroll in more than 17 credits per semester; however, they may submit an <u>Increased Credit Petition</u> to the chair of graduate architecture to be granted permission to exceed this limit. Increased credit petitions are automatically granted in the following circumstances:

- Students enrolled in A46 ARCH 488 Architecture Learning Practicum. Students selected to enroll will receive one credit the first time they enroll in the course and two credits the second time they enroll in the course for a maximum of three credits.
- Students enrolled in A46 ARCH 100A English Language Support for Architecture Students or A46 ARCH 100B Reading and Writing in Architecture, Landscape Architecture, and Urban Design. These courses will count for additional credit but will not add to tuition cost, and they will not displace any required program requirements. The credits will not be counted toward the total necessary requirements for completion of the Master of Architecture degree.

Students may also enroll in summer courses. Summer courses do not have minimum load requirements. Students who successfully complete Washington University courses during the summer session may count the credits toward their degree requirements.

General Electives

The graduate architecture program offers a variety of general electives that vary from semester to semester. General elective topics include:

- History and Theory Research and Writing
- History and Theory Case Studies
- Professional Practice
- Landscape Architecture
- Urban Issues
- Digital Technology
- Architectural Drawing
- Architectural Media
- Sustainable Design
- Energy Efficiency
- Environmental Systems
- Socially Engaged Practice
- Digital Fabrication

- Construction and Advanced Technology
- Furniture Design
- Materials Research
- Historic Preservation

For a list of course listings by semester, please click here.

Students are required to fulfill the following requirements during the program:

- A minimum of one History and Theory Research and Writing elective,
- A second History and Theory elective, Research and Writing, or Case Studies elective, and
- A minimum of one Urban Issues elective.

Students may also fulfill general elective credits by enrolling in a course outside of the architecture department. At a minimum, this must be a 300-level course and may require additional permission. Courses in University College do not count toward degree requirements.

Core Studios

The three-semester graduate core sequence for students in the seven-semester MArch 3 program focuses on building a foundation for the practice of architecture. Its primary role is to prepare students for the complexities of the advanced semesters. Students are exposed to a broad view of all the issues relevant to architecture and contemporary practice. Students are expected to acquire a general disciplinary knowledge base; an understanding of, and ability to exercise, the design process; agility in the conventional and generative use of the various forms of representation in design activity and presentation; and the ability for discernment and critical thought.

The core sequence also emphasizes the development of a strong work ethic through discipline, rigor, perseverance, resourcefulness, and continual experimentation. The core sequence provides basic skills and knowledge, but also inspires passions, provokes new modes of thinking, sparks creativity, and builds confidence.

The three core design studios are carefully sequenced to build on knowledge and skills from one to the other and to incrementally reach greater levels of complexity through the engagement of broader frameworks. The first core studio (317) serves as an introduction to all aspects of a design problem, with an emphasis on reiterative processes of making. Students are encouraged to be imaginative, work with tectonic principles to develop spatial assemblies, and engage the landscape as the site of their building proposals. The second core studio (318) emphasizes the urban context with a cultural program and a multi-family house project. The studio aims for a synthetic design, with an emphasis on non-linear forms of design process. In addition to spatial aspects of program and site, students consider environmental strategies in relation to building form and project siting. The multi-family house project prepares students for the third semester of housing, with projects emphasizing the sectional aspects of building space. The third core studio (419) addresses the importance of housing in a global dimension. Faculty members engage different sites from around the world, with visiting and local faculty often drawing from their own cultural backgrounds when selecting sites. The studio engages more complex and diverse criteria, including the cultural and social dimensions of building form. Washington University has a long-standing tradition of inviting international faculty to teach in the school. As part of this housing initiative, the school invited a number of prominent and emerging international faculty members including Alfredo Paya, Javier Maroto, Monica Rivera, Emiliano Lopez, Philippos Photiadis, and Antonio Sanmartin to work alongside our full-time faculty.

Option Studio Sequence

The advanced semesters center on the design studio as the site for synthesis and integration of conceptualization, research, and development through technology and media across the full range of design scales. Each semester, the design studio is paralleled by course work in building technologies, architectural history and theory, representational techniques, and urban and landscape design issues. Design studios are offered with a variety of design scales, design issues and methodologies, and required means of representation, from the scale of the metropolitan landscape to that of the detail, and from an

emphasis on physical model-making to an emphasis on design development in digital media. Each advanced design semester offers studios instructed by permanent faculty and by renowned visiting professors. Students enter a lottery for placement in the available option studios each semester.

Other Degree Programs

The College of Architecture and Graduate School of Architecture & Urban Design offer the following additional degrees:

- Bachelor of Science in Architecture
- Bachelor of Arts in Architecture
- Master of Landscape Architecture
- Master of Urban Design
- Master of Science in Advanced Architectural Design
- Master of Science in Architectural Studies
- Doctor of Sustainable Urbanism

Dual Degree Programs

Master of Architecture Students may pursue the following dual degrees:

- Master of Landscape Architecture
- Master of Urban Design

Joint Degree Programs

Master of Architecture students may pursue the following joint degrees:

- Master of Social Work
- Master of Business Administration
- Master of Construction Management
- Master of Fine Arts in Visual Art (currently in progress)
- Master of Science in Computer Science Engineering (currently in progress)

Off-Campus Programs

As part of the option studio sequence, international programs offer semester-long studios and support courses in Berlin, Germany (spring semester) and Buenos Aires, Argentina (fall semester), as well as a summer-term curriculum in Barcelona, Spain. The locations are chosen for many reasons: these countries have capitals that are among the most important in the world; their complex cultures reflect explicitly the combination of tradition with technological variation, social diversity, and various modes of craft. The density of these cities is unparalleled, providing urban experiences not available in the Midwest. In addition, these cities' distances from North America, their urban designs bearing different characteristics from those found locally, and the degree of intensity to which they are used by their inhabitants all enhance students' perceptions of the city as a cultural artifact where architecture is a fundamental component of its identity.

For each of the international opportunities, instruction is in English and the instructors are part of the Graduate School's faculty, familiar with the expectations and the quality of our students. Faculty visit for final reviews in order to establish the consistency of the quality of work and understand the broader context. While instructors are part of the Graduate School's faculty, they are also natives and practitioners in the location of study; they invite local specialists and architects to give lectures and participate in seminar courses. These international semesters are strongly encouraged for all students; tuition and living expenses are held at the same level as for semesters in St. Louis. MArch 2 students can realistically incorporate one international opportunity into their curriculum, while MArch 2+ and MArch 3 students can envision two of the three advanced international opportunities.

In 2018, the location for the spring semester abroad will change from Berlin, Germany, to Mumbai, India. The planning for this shift is currently in progress. The Mumbai program will be similar in structure, length of stay, and course offerings to the program offered in Berlin.

Berlin, Germany (Spring)

Courses are conducted at a rented space in downtown Berlin. The facility provides a studio space and seminar room as well as a coffee shop at ground level. Students enrolled in Berlin take 15 credits through a combination of the following courses:

- A46 ARCH 511H/512H/611H Architectural Design (fulfills the comprehensive requirement) 6 Credits
- A46 ARCH 523J Berlin Bricks: Paradigm Shifts and Continuity (fulfills Urban Issues elective) 3 credits
- A46 ARCH 524J Berlin Thinks: Laboratory of Ideas in Pre-War Berlin and Beyond (fulfills History and Theory Case Studies) 3 credits
- A46 ARCH 439H Environmental Systems II* 3 credits
- A46 ARCH 448H Structures II* 3 credits

*These courses are completed through an online learning system, and administered by faculty in St. Louis.

In addition to these courses, students take several group field trips across the city and to other European destinations for a week throughout the duration of the semester. The program last 14 weeks.

Barcelona, Spain (Summer)

Courses are conducted at the Miralles Foundation in downtown Barcelona. The facility provides a studio space where both design studio and seminars are taught. The studio meets every day for four hours and the seminar meets once a week for four hours. Students enrolled in the Barcelona program take 6 or 9 credits through the following courses:

- A46 ARCH 511S/512S/611S Architectural Design 6 credits
- A46 ARCH 420D The European City (fulfills History and Theory Case Studies or Urban Issues requirements) 3 credits

Since the program takes place during the summer session, the program length is 8 weeks and very intensive. In addition to these courses, students take group field trips across the city and to other European destinations throughout the duration of the semester.

Buenos Aires, Argentina (Fall)

Courses are conducted at the Sociedad Central de Arquitectos in downtown Buenos Aires. The facility provides a studio space, seminar room, and large exhibition and review space. In addition, students have access to the architectural library. The building is also home to an architectural bookstore and small restaurant. Students enrolled in the Buenos Aires program take 15 credits through a combination of the following courses:

- A46 ARCH 511B/512B/611B Architectural Design (fulfills the comprehensive requirement) 6 credits
- A46 ARCH 523D History of Architecture in South America (fulfills History and Theory Case Studies) – 3 credits
- A46 ARCH 563E Urban Theory & Cities in Latin America (fulfills Urban Issues) 3 credits
- A46 ARCH 540B Advanced Building Systems 3 credits
- A46 ARCH 555C The Observer & The Observed 1 credit

In addition to these courses, students take several group field trips across the city and to other South American destinations throughout the duration of the semester. The program last 16 weeks.

Master of Architecture students may also participate in the Master of Urban Design's Global Urbanism Studio program that takes place during the summer; recently the program has been sited in South Africa and Ghana. Participation in this studio will fulfill an option studio requirement.

II.3 EVALUATION OF PREPARATORY EDUCATION

Admissions Process

The admissions process for the Graduate School of Architecture & Urban Design is managed by a fulltime graduate admissions coordinator under the direction of the director of the College of Architecture and Graduate School of Architecture & Urban Design. Applications for admission to our graduate programs including the Master of Architecture program—typically open by early October. The application materials may be submitted in stages, but the deadline for all parts of the application is January 15 of the enrollment year.

All candidates submit an application through our online application system. The application consists of the following required materials:

- Personal information
- Statement of objective
- Resume/curriculum vita
- Three letters of recommendation
- Official transcripts*
- GRE scores (Optional)
- English language scores**
- Portfolio
- Nonrefundable application fee

*Candidates can submit unofficial digital copies of transcripts during the application process, but are required to submit sealed official, hard-copy transcripts upon admission to the program.

**A Test of English as a Foreign Language (TOEFL) score or International English Language Testing System (IELTS) score is required if the applicant's native language is not English. The minimum acceptable TOEFL scores are 90 on the Internet-based test, 577 on the paper-based test, or 233 on the computer-based test. The IELTS score minimum if 7.0. Note that an exception to the English test score requirement is made for candidates who have student four years toward a baccalaureate degree in the United States. TOEFL and IELTS test scores must be sent directly to our admissions office by the testing agency.

After the application deadline, the admissions staff reviews all applicant files for completion and sorts applications between the three tracks (MArch 3, MArch 2+, MArch2) based on past educational experience and/or designated desired entry by the applicant. The applications are then sent to review groups consisting of a minimum of two faculty members and one current student. The reviewing teams are dedicated to specific tracks. In some instances, reviewers may determine that an applicant does not meet the qualifications for the specific track they are reviewing. In this case, the application is returned to the graduate admissions coordinator and assigned to a new reviewing team for a different track. Applicants applying for a dual degree in the Master of Landscape Architecture program or Master of Urban Design program are reviewed by both programs independently. If they receive admission to both programs, they are accepted to the dual degree. If an applicant is only admitted to one of the programs, they receive admission to the individual program only.

The reviewers independently review the applications and convene during a dedicated all-day session for graduate admission reviews to compare evaluations and provide a rank for the applicants. The review groups use a numerical system to assign a score based on the admission requirements. These results are returned to the graduate admissions coordinator for review by the director. The director reviews the results and identifies any discrepancies, and then designates thresholds for admissions. Once the admitted applicants have been identified, the graduate admissions coordinator sends acceptance and denial letters to the applicants. The numerical rankings are also utilized to determine financial awards and assignments for available scholarships. The Graduate School does not use a wait-list system.

Students who need financial assistance to fund their graduate studies are required to apply for financial aid no later than February 15 of the enrollment year. Financial aid applications do not influence decisions for graduate admission. We understand that finances are an important consideration for prospective

students, and 95% of our current graduate student population receives aid. Financial aid awards are based on academic excellence and financial need, and packages most often consist of a combination of scholarships and loan assistance. Our policy is to provide aid to as many applicants as possible by distributing awards to more students rather than concentrating larger awards to fewer students. Our staff includes a dedicated financial aid awards associate to assist students with their financial outlook.

Scholarship assistance is awarded by the Graduate Scholarship Committee of the Graduate School of Architecture & Urban Design to applicants who have applied for financial aid. Total scholarship award amounts are based on a combination of need (determined by the financial aid application) and merit (determined by the admission application ranking). Tuition Remission Scholarships account for the majority of total aid and are offered to students from all areas and backgrounds. Each admitted student receives a separate letter containing their financial award package during the admissions decision process.

Notable awards offered by the Graduate School of Architecture & Urban Design include:

- Sam Fox School Full-Tuition Award
- Danforth Scholars Program
- Asian Scholarship Fund

Other School and University-wide scholarship opportunities include:

- Chancellor's Graduate Fellowship
- Mr. and Mrs. Spencer T. Olin Fellowship for Women
- McDonnell International Scholars Academy
- American Institute of Architects Scholarship

A description of these scholarship opportunities can be found at <u>here</u>.

All admissions decisions are due by April 15 of the enrollment year, with the exception of students admitted to the MArch 2 program. See below for additional requirements for admission to this degree program.

Admission Requirements

MArch 3 are placed at the 317 studio level. Applicants interested in the MArch3 program must have an undergraduate baccalaureate degree. In addition, it is preferred that applicants demonstrate satisfactory completion of one course each in elementary calculus and college physics prior to enrollment. Through the portfolio, applicants are asked to demonstrate ability and experience in freehand drawing and/or two-or three-dimensional basic design exercises.

Master of Architecture advanced placement students (MArch2+ and MArch 2 programs) are placed at either the 419 or 511 studio level. Applicants interested in advanced placement must have an undergraduate baccalaureate degree in architecture or architectural studies. Placement in the advanced placement programs is based on design portfolio evaluation and the extent of the applicant's architectural studies. In order for applicants to complete all of the degree requirements in the advanced placement degree programs, they must submit course waivers.

Advanced placement is based on the assumption that courses "below" the student's program entry level—equivalent to those required at Washington University—have already been completed. Students with advanced placement are encouraged to obtain course waivers for course requirements. If students do not waive course requirements, they are required to complete them as part of their degree requirements. Students accepted into the Master of Architecture two-year program are required to complete submit course waivers during the admissions process. In order to be officially admitted to the MArch 2 program, applicants must waive a minimum of three of the following courses:

- A46 ARCH 4280 Architectural History I
- A46 ARCH 4284 Architectural History II
- A46 ARCH 438 Environmental Systems I
- A46 ARCH 439 Environmental Systems II

- A46 ARCH 445 Building Systems
- A46 ARCH 447A Structures I
- A46 ARCH 448A Structures II

If an applicant does not successfully waive a minimum of three courses, they will be admitted at the Master of Architecture two-and-a-half-year program. Students admitted to the MArch 2+ program must be able to waive one of the following courses:

- A46 ARCH 4284 Architectural History II
- A46 ARCH 438 Environmental Systems I
- A46 ARCH 439 Environmental Systems II
- A46 ARCH 445 Building Systems
- A46 ARCH 447A Structures I

Applicants who cannot waive one of these courses will be required to take A46 ARCH 447A Structures I and A46 ARCH 448A Structures II in the summer session preceding A46 ARCH 538C Advanced Building Systems.

Course Waiver Process

Applicants admitted to the graduate architecture program at any placement level are allowed to submit application materials for course waivers. We are committed to making sure all students receive the content outlined in the Student Performance Criteria. We do not offer transfer credit, but applicants and current students may submit undergraduate and prior graduate course work for review to "waive" out of the following courses:

- A46 ARCH 4280 Architectural History I
- A46 ARCH 4284 Architectural History II
- A46 ARCH 438 Environmental Systems I
- A46 ARCH 439 Environmental Systems II
- A46 ARCH 445 Building Systems
- A46 ARCH 447A Structures I
- A46 ARCH 448A Structures II

Course waivers will only be granted for an equivalent course or combination of courses completed satisfactorily in undergraduate studies. Equivalence is measured in terms of both content and assignments. All waived courses will be fulfilled with general elective credits.

Applicants with a contingent acceptance to the Master of Architecture two-year program submit waivers during the admissions process in early April. The admitted students will receive an admission letter accompanied by the course waiver requirements. The admitted students then submit course waiver documents for review. Once reviewed, the admitted students will receive a letter with a final admission placement based on course waiver results and a modified date to confirm their acceptance.

All current students can apply for course waivers once a year. An email is sent out to all graduate architecture students on July 1, and they are allowed to submit required documents by July 15. Students submit course waiver documents to <u>samfox-archwaivers@email.wustl.edu</u>. The documents are checked for completion and submitted to the reviewing faculty members.

Designated faculty members who have expertise in the relevant subject area review all of the submitted documents and determine if the previous course work fulfills the course requirements. Each submission will either be assigned as "waived" or "denied." Results are sent to the programs manager and then distributed to the Registrar's Office and students. All waived courses are replaced with general elective credits.

The requirements for each course are as follows:

A46 ARCH 4280 Architectural History I

Students requesting a waiver must submit a transcript and syllabus. The syllabus should clearly describe session topics, readings, and assignments. The previous course(s) must include significant coverage on all of the following topics: Greco-Roman Classicism, European Middle Ages, Renaissance+Baroque, and 18th/19th century Neoclassicism and the Industrial Revolution. Students are also expected to have been exposed to a significant amount of non-Western content, such as Pre-Columbian, Islamic, South Asian, or East Asian. The previous course must also include a substantial research-based writing assignment.

A46 ARCH 4284 Architectural History II

Students requesting a waiver must submit a transcript and syllabus. The syllabus must clearly describe session topics, readings, and assignments. The previous course(s) must have covered 20th century architecture, and not be a survey of a particular country or region, such as American Architecture or Architecture in China.

A46 ARCH 438 Environmental Systems I

Students requesting a waiver must submit a transcript and syllabus, as well as course exercises or completed work. Students may be asked to complete a quiz related to course content.

Some students may only receive partial waivers. Students who receive a partial waiver are required to complete the Site Planning portion of Environmental Systems I. This 1-credit course is listed as A46 4381 Environmental Systems I – Site Planning.

A46 ARCH 439 Environmental Systems II

Students requesting a waiver must submit a transcript and syllabus. Students must also complete a quiz related to course content. It is recommended that students review previous course material prior to their waiver meeting.

Some students may only receive partial waivers. Students who receive a partial waiver are required to complete the Acoustics portion of Environmental Systems II. This 1-credit course is listed as A46 4391 Environmental Systems II – Acoustics.

A46 ARCH 445 Building Systems

Students requesting a waiver must submit a copy of their transcript with a passing grade for the equivalent course(s), a course syllabus, a course calendar, and the title of the course-required text. Translations are required if the original documents are not in English. Students should also submit examples of course work (name, date, and course identification should be visible for all work):

- Required Wall Section(s)
- Optional/Preferred Ramps & Accessibility assignments, other relevant assignments/writings/exams/quizzes

A46 ARCH 447A Structures I

Students requesting waivers must submit a transcript and course syllabus. If no syllabus is available, a student must submit completed course work, texts, handouts, or other course materials.

A46 ARCH 448A Structures II

Students requesting waivers must submit a transcript and course syllabus. If no syllabus is available, a student must submit completed coursework, texts, handouts, or other course materials.

II.4 PUBLIC INFORMATION

II.4.1 Statement on NAAB-Accredited Degrees

All institutions offering a NAAB-accredited degree program must include the <u>statement</u> on NAAB-accredited degrees.

II.4.2 Access to NAAB Conditions and Procedures

The program must make the following documents electronically available to all students, faculty, and the public:

- The 2014 Conditions for Accreditation
- The <u>Conditions for Accreditation</u> in effect at the time of the last visit (2012)
- The *Procedures for Accreditation* currently in effect (2015)

II.4.3 Access to Career Development Information

The program must demonstrate that students and graduates have access to <u>career development</u> and placement services that help them develop, evaluate, and implement career, education and employment plans.

II.4.4 Public Access to APRs and VTRs

The program is required to make the following documents electronically available to the public:

- All Interim Progress Reports
- All <u>NAAB responses</u> to Interim Progress Reports
- The most recent <u>decision letter</u> from the NAAB
- The most recent APR
- The final edition of the most recent Visiting Team Report, including attachments and addenda

II.4.5 ARE Pass Rates

Programs are required to make <u>NCARB pass rates</u> for each section of the Architecture Registration Examination available to current and prospective students and the public by linking their websites to the results.

II.4.6 Admissions and Advising

The program must publicly document all policies and procedures that govern how applicants to the accredited program are evaluated for <u>admission</u>.

II.4.7 Student Financial Information

The program must demonstrate that students have access to information and advice for making decisions regarding <u>financial aid</u>.

The program must demonstrate that students have access to an <u>initial estimate</u> for all tuition, fees, books, general supplies, and specialized materials that may be required during the full course of study for completing the NAAB-accredited degree program.

III.1.1 ANNUAL STATISTICAL REPORTS

The program must <u>certify</u> that all statistical data it submits to NAAB has been verified by the institution and is consistent with institutional reports to national and regional agencies, including the Integrated Postsecondary Education Data System and the National Center for Education Statistics.

III.1.2 INTERIM PROGRESS REPORTS

The program must submit Interim Progress Reports to NAAB.

Section 4. Supplemental Material

The program shall provide a number of documents for review by the visiting team.

Rather than being appended to the APR, they are to be provided by hyperlink or stored on an easily accessible digital portal to be reviewed by the visiting team in advance of the visit.

Faculty Resumes

For resumes of the instructional faculty who teach in the professional degree program, please click here.

Faculty Credentials Matrices

For a matrix for each of the two academic years prior to the preparation of the APR, please click here.

Physical Resources

For plans and images of our physical resources, please click here.

Course Descriptions

For a description of all courses offered within the curriculum of the NAAB—accredited degree program, please click <u>here</u>.

Studio Culture Policy

For the full document of the studio culture policy, please click here.

Information Resources

For University library resources, please click here.

Student Policies

For the academic integrity policy, please click <u>here</u>. For Washington University's academic policies, please click <u>here</u>. For disability resources, please click <u>here</u>. For the Graduate School of Architecture & Urban Design registration policies, please click <u>here</u>. For the Graduate School of Architecture & Urban Design academic probation policy, please click <u>here</u>. For the Student Code of Conduct, please click <u>here</u>. For the Student Conduct Code and Community standards resources, please click <u>here</u>. For the University Judicial Code, please click <u>here</u>.

EEO/AA for Faculty, Staff, and Students

For the Equal Opportunity and Affirmative Action policy, please click <u>here</u>. For University non-discrimination statement, please click <u>here</u>. For the policy on discriminatory harassment, please click <u>here</u>. For the policy on sexual harassment, please click <u>here</u>.

Diversity & Inclusion

For the Center for Diversity & Inclusion, please click <u>here</u>. For provost's statement on diversity, please click <u>here</u>.

Faculty Polices

For the faculty information handbook, please click <u>here</u>. For parental leave for tenured or tenure-track faculty, please click <u>here</u>. For parental leave for non-tenure track faculty, please click <u>here</u>. For the sabbatical leave policy, please click <u>here</u>. For the faculty committee policy, please click <u>here</u>. For the policy on faculty appointment, retention, tenure, and promotion, please click <u>here</u>.