Carnegie Mellon University
School of Architecture

Architecture Program Report for the 2018 NAAB Visit for Initial Candidacy

Master of Architecture

270 CMU units (non-architecture Bachelor’s degree) (90 credit-hrs)
(Undergraduate degree + 270 M.Arch)
180 CMU units (60 credit-hrs) (pre-professional Bachelor’s in architecture)
(Undergraduate degree + 180 M.Arch)

Year of the Previous Visit:
N/A

Current Term of Accreditation:
N/A

Submitted to: The National Architectural Accrediting Board
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Carnegie Mellon University | School of Architecture

Architecture Program Report for the 2018 NAAB Visit for Initial Candidacy

Program Administrator: (submitting report and to whom questions should be addressed)

Kai Gutschow, PhD, Associate Professor, Co-Director Studio-based Programs
School of Architecture
Carnegie Mellon University
5000 Forbes Ave, CFA214
Pittsburgh, PA 15213
(412) 268- 7999 | gutschow@andrew.cmu.edu

Chief administrator for the academic unit in which the program is located:

Stephen R. Lee, AIA, LEED AP
Professor & Head
School of Architecture
Carnegie Mellon University
5000 Forbes Ave, CFA214
Pittsburgh, PA 15213
(412) 268-3528 | stevelee@andrew.cmu.edu

Interim President of Carnegie Mellon University:

Farnam Jahanian, PhD
Carnegie Mellon University
5000 Forbes Ave.
Pittsburgh, PA 15213
(412) 268-2200 | president@cmu.edu

Interim Provost of Carnegie Mellon University:

Laurie Weingart, PhD
Carnegie Mellon University
5000 Forbes Ave.
Pittsburgh, PA 15213
(412) 268-7585 | weingart@cmu.edu

Chief Administrator of the College of Fine Arts:

Dan Martin, Professor & Dean
College of Fine Arts
Carnegie Mellon University
5000 Forbes Ave, CFA100
Pittsburgh, PA 15213
(412) 268-2349 | djmartin@cmu.edu
Table of Contents

APR – Part One (I): Institutional Support And Commitment To Continuous Improvement

Section 1 – Program Description
  I.1.1 History and Mission .................................................. 5
  I.1.2 Learning Culture ...................................................... 13
  I.1.3 Social Equity .......................................................... 16
  I.1.4 Defining Perspectives ................................................. 18
  I.1.5 Long-Range Planning ................................................. 24
  I.1.6.A Program Self-Assessment ........................................ 25
  I.1.6.B Curricular Assessment and Development .................... 27

APR – Section 2 – Progress Since the Previous Visit (Not Applicable)

APR – Section 3 – Compliance with the Conditions for Accreditation
  I.2.1 Human Resources and Human Resource Development .......... 29
  I.2.2 Physical Resources .................................................. 30
  I.2.3 Financial Resources .................................................. 40
  I.2.4 Information Resources ............................................... 44
  I.2.5 Administrative Structure and Governance ....................... 46

Part Two (II): Educational Outcomes And Curriculum
  II.1.1 Student Performance Criteria .................................... 48
  II.2.1 Institutional Accreditation .......................................... 51
  II.2.2 Professional Degrees and Curriculum .......................... 53
  II.3 Evaluation of Preparatory Education ................................ 59
  II.4 Public Information .................................................... 61

Part Three (III): Annual And Interim Reports
  III.1.1 Annual Statistical Reports ....................................... 62
  III.1.2 Interim Progress Reports .......................................... 63

APR – Section 4 – Supplemental Material .................................. 64
March 15, 2017

Ms. Andrea Rutledge, CAE
Executive Director
National Architectural Accreditation Board
1735 New York avenue NW
Washington, DC 20006

Dear Ms. Rutledge:

I write to inform you of the decision of Carnegie Mellon University to seek candidacy for accreditation for a Master of Architecture (MArch) degree.

We will enroll our first class in fall 2017 and this program is intended for students that have earned a baccalaureate degree from an accredited institution in a non-architecture field. A total of 270 Carnegie Mellon units are required in the Master of Architecture (equivalent to 90 credit hours) for the full three-year track and a total of 180 Carnegie Mellon units are required in the two year, advanced standing track (equivalent to 60 credit hours).

Accompanying this letter are all of the materials stipulated in the 2015 NAAB Procedures for Accreditation and the 2014 NAAB Conditions for Accreditation.

We look forward to continuing the process to full accreditation.

Very truly yours,

Farnam Jahanian
Provost and Chief Academic Officer
November 22, 2013

Dr. Subra Suresh
President
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15213

Dear Dr. Suresh:

At its session on November 21, 2013, the Middle States Commission on Higher Education acted:

To accept the Periodic Review Report, to reaffirm accreditation, and to commend the institution for the quality of the Periodic Review process and report. The next evaluation visit is scheduled for 2017-2018.

Enclosed for your information is a copy of the Statement of Accreditation Status for your institution. The Statement of Accreditation Status (SAS) provides important basic information about the institution and its affiliation with the Commission, and it is made available to the public in the Directory of Members and Candidates on the Commission’s website at www.msche.org. Accreditation applies to the institution as detailed in the SAS; institutional information is derived from data provided by the institution through annual reporting and from Commission actions. If any of the institutional information is incorrect, please contact the Commission as soon as possible.

Please check to ensure that published references to your institution’s accredited status (catalog, other publications, web page) include the full name, address, and telephone number of the accrediting agency. Further guidance is provided in the Commission’s policy statement Advertising, Student Recruitment, and Representation of Accredited Status. If the action for your institution includes preparation of a progress report, monitoring report or supplemental report, please see our policy statement on Follow-up Reports and Visits. Both policies can be obtained from our website.

Please be assured of the continuing interest of the Commission on Higher Education in the well-being of Carnegie Mellon University. If any further clarification is needed regarding the SAS or other items in this letter, please feel free to contact Dr. Andrea A. Lex, Vice President.

Sincerely,

R. Barbara Gltenstein, Ph.D.
Chair

The Middle States Commission on Higher Education accredits institutions of higher education in Delaware, the District of Columbia, Maryland, New Jersey, New York, Pennsylvania, Puerto Rico, the U.S. Virgin Islands, and other locations abroad.
Section 1 – Program Description

I.1.1 History and Mission:

A brief history of the institution, its mission, founding principles, and a description of how that is expressed in the context of 21st century, U.S. higher education

Carnegie Mellon University: CMU has been a birthplace of innovation throughout its 111-year history. Today, it is a global leader bringing groundbreaking ideas to market and creating successful start-up businesses. The faculty members are renowned for working closely with students to solve major scientific, technological, and societal challenges. The University puts a strong emphasis on creating things—from art to robots, and architecture.

CMU is the only school founded in the United States by industrialist and philanthropist Andrew Carnegie, who wrote the time-honored words, "My heart is in the work," when he donated the funds to create Carnegie Technical Schools in 1900 in Pittsburgh, Pennsylvania. In 1912, the schools, including the School of Architecture, became the Carnegie Institute of Technology, highly regarded for both the arts and technology. A merger with the Mellon Institute—the nation’s first major research institute—created Carnegie Mellon University in 1967. Today, CMU is a national research University of about 11,500 students and 5,000 faculty, research, and administrative staff.

CMU is a diverse blend of academic disciplines. The University consists of seven colleges and schools: the College of Fine Arts (which includes the School of Architecture), the Carnegie Institute of Technology (engineering), the Dietrich College of Humanities and Social Sciences, the Mellon College of Science, the Tepper School of Business, the School of Computer Science, and the H. John Heinz III College (Public Policy & Information Systems). It has become an international leader in technological fields such as computer science, robotics, and engineering. From its inception it has had a strong emphasis on the applied and practical arts and trades, as well as the fine arts. Its position of leadership in both the arts and technology is unusual in higher education today.

During President Jared L. Cohon’s administration (1997-2013), CMU became a global university, establishing campuses in Silicon Valley, CA, and Doha, Qatar, and degree-granting programs in Africa, Asia, Australia, Europe, and Latin America. CMU’s current president, Subra Suresh, came to CMU in 2013. Prior to coming to CMU Suresh was Dean of Engineering at MIT, and later director of the U.S. National Science Foundation (NSF), a $7-billion independent federal research-funding agency. While at NSF, Suresh helped to found the Global Research Council, a coordinating group for research-funding agencies around the world. Since arriving at CMU, Suresh has launched the Simon Initiative to bring together university and global leaders in a discussion of how technology could be fully utilized to enhance learning outcomes for students around the world. He has also been instrumental in beginning construction of the Tepper Quad, a major new hub on campus for the business school and collaborative spaces for the university.

The Strategic Plan 2025 for the university focuses on increasing the quality, richness, and value of “the CMU experience” for all individuals, the community, as well as the University's impact in the world. (See https://www.cmu.edu/strategic-plan/). It speaks for the entire CMU community:

Vision: “Carnegie Mellon University will have a transformative impact on society through continual innovation in education, research, creativity, and entrepreneurship.”

Mission: “To create a transformative educational experience for students focused on deep disciplinary knowledge; problem solving; leadership, communication, and interpersonal skills; and personal health and well-being. To cultivate a transformative university community committed to (a) attracting and retaining
diverse, world-class talent; (b) creating a collaborative environment open to the free exchange of ideas, where research, creativity, innovation, and entrepreneurship can flourish; and (c) ensuring individuals can achieve their full potential. To impact society in a transformative way—regionally, nationally, and globally—by engaging with partners outside the traditional borders of the university campus.”

Values: “Dedication, reflected in our distinctive work ethic and in our commitment to excellence. Impact, reflected in our commitment to address critical issues facing society regionally, nationally, and globally. Collaboration, reflected in our interdisciplinary approach, our focus on internal and external partnerships, and our capacity to create new fields of inquiry. Creativity, reflected in our openness to new ideas and forms of expression, intellectual curiosity, willingness to take risks, and entrepreneurial spirit. Empathy and compassion, reflected in our focus on improving the human condition and on the personal development of the members of our community. Inclusion, reflected in a culture and climate that seeks, welcomes, and advances talented minds from diverse backgrounds. Integrity, reflected in our adherence to the highest ethical standards in personal and professional behavior, and in our commitment to transparency and accountability in governance and everything we do. Sustainability, reflected in our shared commitment to lead by example in preserving and protecting our natural resources, and in our approach to responsible financial planning.”

College of Fine Arts (CFA): The School of Architecture (SoA) is one of five schools within CMU’s College of Fine Arts (CFA), alongside the schools of Art, Design, Drama, and Music. Founded in 1905, the CFA was the first comprehensive arts learning institution in the United States. Today it is a unique constellation of internationally top-ranked conservatory schools in the arts embedded within a tier-one research university. The five schools are committed to community engagement, supportive of creative risk-taking, and actively embracing diversity. The pedagogy across the college is built on the principles of “thinking through doing” and “learning through doing” in studio and conservatory-based environments, and respect for tradition while encouraging innovation.

The CFA is internationally renowned for its unique multidisciplinary capabilities and distinctive pedagogical approaches, for the success and influence of its students and alumni, for visionary leadership in the development and transformation of the professions, and for its vital role in melding the exceptional capabilities of a great university with society and culture. The college shares numerous research projects, interdisciplinary centers, and educational programs with other units across the university. In addition to undergraduate and graduate programs in each of the five schools, the college offers interdisciplinary bachelor’s degrees integrating studies in fine arts with work in the humanities, sciences, or computer science. Interdisciplinarity, a core value for the CFA, is realized not only in individual exploration and scholarship of our students and faculty across various colleges and disciplines, but also through the BXA Intercollege Degree Programs and a number of degrees offered in collaboration with other academic units. The Integrative Design, Arts and Technology Network (IDeATe) connects students and faculty from across the university through coursework and collaborative studio experiences.

School of Architecture (SoA) - Quick Facts (People, Programs, Place)

There are 63 faculty members (41.8 FTE) in the SoA; this number includes tenured, tenure-track, research, special, visiting, and adjunct faculty. This represents all faculty in the SoA, but only the resumes of those teaching in the Master of Architecture program are included in section I.2.1 below.

There are 15 administrative and technical staff (12.2 FTE) that work in the SoA, as well as 11 research staff (7 FTE).

There are 211 students currently enrolled in CMU’s 5-year B.Arch program, with an additional 11 students in the BA, BXA, and other interdisciplinary programs. There are an additional 100 students in the masters and PhD graduate programs run by the school. The students come from 14 countries and 17 states.

CMU’s SoA has been educating professional architects for over a hundred years at both the
undergraduate and graduate level, in both professional design-based methods, as well as more scientific research-based methods.

For undergraduates, we have long offered a 5-year, NAAB-accredited first professional Bachelor of Architecture (B.Arch), as well as a 4-year, pre-professional Bachelor of Arts (BA) in Architecture.

Post-professional, studio-based graduate programs include a Master in Tangible Interaction Design degree (MTID); a Master of Urban Design degree (MUD); and the Master of Advanced Architectural Design (MAAD).

Post-professional, STEM-based graduate programs have a long history in the SoA. The programs include Master of Science (MS) degrees in the following areas: Architecture-Engineering-Construction Management (MSAECM), Computational Design (MSCD), Building Performance and Diagnostics (MSBPD), and Sustainable Design (MSSD).

Undergraduate students may apply to participate in the Accelerated Master’s Program (AMP) in these areas to gain advanced placement by double counting graduate units towards their B.Arch and their selected graduate program whilst maintaining their undergraduate financial aid package in their 5th year.

PhD’s are offered in Architecture-Engineering-Construction Management (AECM), Computational Design (CD), and Building Performance And Diagnostics (BPD), as well as the Doctor Of Professional Practice (DPP).

The undergraduate and graduate programs cross disciplinary boundaries and collaborate not only with other schools within the College of Fine Arts, but also across campus, with the Heinz School, the Carnegie Institute of Technology, the School of Computer Science, the College of Humanities and Social Sciences, and the Tepper School of Business.

The SoA has an international reputation as a leading research and educational center for sustainable design, and is home to the Intelligent Workplace, the only “living laboratory” of its kind in the U.S. Three additional interests define and distinguish the school’s research initiatives: computational design, public interest design, and urban design.

The school has multiple centers, institutes and labs: the Intelligent Workplace (home to the Center for Building Performance and Diagnostics), the Computational Design (CoDe) Lab, the Project_RE (off campus at Construction Junction), the Digital Fabrication (dFAB) Lab, the Remaking Cities Institute, and the Shop.

The SoA occupies over 50,000 sq. ft. between Margaret Morrison Carnegie Hall and the College of Fine Arts on the Pittsburgh campus of CM, as well as another 14,900 sf at +Project_RE (off campus at Construction Junction).

The budgeted general operating expenditures for the School of Architecture in the current year of FY2016-17 are $5,909,093.

SoA Mission Statement: The School of Architecture (SoA) provides deep immersion in the discipline of architecture, intensified by the broader Carnegie Mellon culture of interdisciplinary innovation and creative inquiry. Our undergraduate and graduate degree programs prepare students to be excellent, discipline-defining design thinkers in diverse global contexts. This world-class architecture education is enhanced by our position within one of the world’s leading research and entrepreneurship institutions, and by the fundamental premise that architectural excellence demands both rigorous training in fundamentals and the development of unique specializations. Students may extend their core knowledge either through concentration in architecture subdisciplines like sustainable design or computational design or public
interest design, or through interdisciplinary interaction with CMU’s other renowned programs. Though every Carnegie Mellon architecture student graduates with intensive architecture knowledge, no two graduates leave with exactly the same focus. Graduates of SoA excel in the roles architects have performed for centuries—and in new roles catalyzed by the depth and breadth of their education—to create and execute innovative solutions to an ever expanding range of global challenges.

**SoA History:** Architecture has been an integral part of education at CMU since its beginnings in 1905. The founder and patrons of the Carnegie Technical Schools saw it as their goal to create a particularly American fusion of the Ecole Polytechnique and the Ecole des Beaux-Arts. Carnegie Tech’s first Professor of Architecture, Henry Hornbostel, was himself a student at the Paris Ecole des Beaux-Arts (in 1895-97).

By the end of the ‘40s, the teaching of Architectural Design did not emphasize the established Beaux-Arts principles, rather, the observation of human behavior and needs in relation to the built and natural environment. In the ‘60s, under the direction of Paul Schweikher, the undergraduate B.Arch program became a five-year, fixed-length program. As was common elsewhere during this period, it consisted of an introductory year of basic design followed by four years of architectural design. A long list of distinguished visitors and lecturers were introduced.

The appointment of Charles M. Eastman in 1967 as Assistant Professor of Architecture and Computer Design marked a departure prophetic of new departmental directions. Eastman developed a Ph.D. program in the new science of Computer-Aided Design. The appointment of Volker Hartkopf in 1972 as Assistant Professor of Architecture broadened the graduate program with an M.S. and a Ph.D. offering in Building Science. Since this time, scientific and technical research has been at the center of the SoA’s mission and identity. The succession of Department Heads from 1979 to 2004 made strategic hires in these areas that securely established our research reputation. These research programs and the associated faculty have raised the status and reputation of the CMU SoArch, especially on the focused ideas of building performance, computing, and construction management, as they can be applied to global practice, business, and academic research. Our PhD graduates have gone on to become leaders in academia around the world.

In the ‘70s and into the ‘80s with Delbert Highlands, Robert Taylor, and Louis Sauer as Heads, the B.Arch program developed into a four-level, variable-length program. A NAAB accredited M.Arch was offered in parallel from 1970-1991. Distinctive characteristics of both programs during these years include the introductory course in architecture that was developed as an alternative to courses in basic design; the four-level design sequence which defined skills necessary for advancement through the program; the technology sequence which structured architectural technology in a manner parallel to architecture design; and the possibility (never more than 10-15% of all students) of completing the program in a period of four years.

Omer Akin became Department Head in 1981 and (re-)introduced a fixed five-year B.Arch curriculum, which is still in place today. In the fall of 1994, Vivian Loftness was appointed Head of the Department and was joined by Bruce Lindsay as Associate Head in 1995. Building on the curricular efforts led by Doug Cooper and the entire full-time faculty, a revised curriculum was adopted that called for parallel creative, technical, environmental, and historical competences. At the heart of the curriculum was the tightly structured ten-semester studio sequence organized around a series of interrelated critical knowledge areas: Design, Representation, History/ Theory, Technology and Practice.

In 1998, the Department of Architecture was re-designated the CMU “School of Architecture” to reflect the strength of its conservatory-based professional practice degree program, in parallel to the other four schools in the CFA. In the early 2000s, the SoA Advisory Board recommended an increase in Master’s programs as a source of revenue for the School, and we quickly went from two MS programs to seven, moving the school ever further in the research-based, post-professional graduate program direction.
In July 2004 Laura Lee was appointed Head. Seeking to re-elevate the importance of design studio alongside interdisciplinary arts and professional practice, she worked to develop CMU into a center of excellence for integrated design. Through a series of tenure-track hires to strengthen studio education and build related programs, Lee was instrumental in beginning to shift the focus of the SoA into a more balanced one of design and research, across both graduate and undergraduate levels. Through their roles as studio coordinators and/or as individual studio instructors, the new hires made an immediate and noticeable impact on the design studios with an emphasis on design and learning by making. The Urban Design/Build Studio (UDBS) was begun, the dFAB Lab was built and made available to multiple studios and courses, the Computational Design Lab (CoDe) was created, hands-on activities were extended into the architectural studies coursework and the Shop continued to play an important curricular role.

In July 2008, Stephen Lee (no relation to Laura Lee) was appointed as the Interim Head of the SoA. After a search in 2009, Lee was appointed to a full five-year term as Head, and in 2015 he was re-appointed to another five-year term. As alumnus with a B.Arch and an M.Arch in Advanced Building Studies from CMU in the mid-70s, a practitioner, a researcher, and as a faculty member since 1981, he brings a unique perspective to the position. Through a deep belief that design is the backbone and core of our discipline, he has worked to bridge, and integrate teaching, practice and research in the SoA, and to expand interdisciplinary opportunities in those venues.

During his Headship, Lee has worked to revise the B.Arch curriculum to provide more fundamental courses in the first three years, and to provide greater flexibility in the last two years. In 2011 an outside consultant was engaged to conduct a year-long strategic planning process that re-focused the school on the themes of design thinking, learning by making, and improving the quality of the built environment. A new “3+2” B.Arch curriculum was implemented in 2012-13 to reflect these ambitions. The studios in Margaret Morrison were substantially renovated to support better collaboration, while computer labs were disassembled and workstations were incorporated into the studios to further the integration of analog and digital thinking in the studio.

After administering the NAAB re-accreditation process for the B.Arch in 2012 resulting in a six year term, Lee oversaw the internal CMU Presidential Advisory Board process for the whole SoA in 2014. These reviews, two years apart from one another, provided excellent outside assessment of our strengths and weaknesses and recommendations for improvement. Steps taken since 2014 include hiring 12 new full-time faculty, who developed a suite of new courses in SoA’s areas of expertise, the development of a new SoA website and logo along with a more comprehensive publicity strategy, providing better mentoring and advising for all students from B.Arch to PhD, restructuring the Master of Urban Design (MUD) degree, and developing two new design-based master’s programs, the Master of Advanced Architectural Design (MAAD, begun 2015-2016), and the professional Master of Architecture (M.Arch) degree in this APR-IC (begins Aug. 2017).

A brief history of the program, its mission, founding principles, and a description of how that is expressed in the context of the 21st century, U.S., architecture education.

M.Arch: CMU’s graduate-level architectural design education goes back to at least 1919. CMU offered a NAAB accredited M.Arch from 1970-1991, and graduated nearly 200 students, including the current Head of School. Officially, the SoA M.Arch degree is still on the books at the CMU registrar’s office (Code: MAC). Although we are technically reactivating a dormant program, we were eager to do extensive research into the changed professional and educational landscape, to create a program built on tradition, but working with today’s resources, and fully future-oriented in its conception.

SoA faculty have discussed re-building an M.Arch numerous times over the last decade. The 2007 and 2014 CMU internal Presidential Advisory Boards, as well as the 2011 SoA Strategic Plan process advocated either transforming the B.Arch into an M.Arch (“nomenclature change”), or building a new, separate M.Arch. We have chosen the latter. The implementation of a revised “3+2” B.Arch curriculum in
2012 helped pave the way for a 3-year M.Arch program by developing both a tighter schedule of core professional courses, and more advanced vertically integrated option studios, both of which could accommodate M.Arch graduate students. The development of the 2-year, post-professional, studio-based Master of Advanced Architectural Design (MAAD) program in 2014-15, as well as the retooling of the design-based Master of Urban Design (MUD) degree, were further important step in strengthening SoA graduate design education.

During summer 2015, professors Kai Gutschow and Jeremy Ficca drafted the 3-year M.Arch program, with regular input from Head Steve Lee and others. The proposed M.Arch program was presented and discussed extensively at the SoA Retreat on 28 August, and reached consensus at the full time SoA faculty meeting on 23 September, 2015. It was presented to, and approved by, CFA College Council on 27 Oct. 2015, and passed through the university’s “New Academic Program Process” (NAPP 1) with Vice Provost for Education Amy Burkert in Nov. 2015. The fact that the program was still on the books in the CMU registrar’s office, as well as assurances of high quality professional education provided by the NAAB accreditation process, made the approval relatively easy for the university. In the spring of 2016, Kai Gutschow and Steve Lee wrote the 75-page “Plan For Achieving Initial Accreditation.” We received written approval from NAAB that the program is ‘eligible for candidacy’ on Aug. 16, 2016. Since then we have been working on marketing the program, and developing the admissions process. Graduate orientation starts on Aug. 14, and classes begin on Aug. 28, 2017.

The proposed “Master of Architecture” (M.Arch) is a three-year, studio-based, first professional degree program to educate tomorrow’s leaders in architecture-related careers. It has been developed strategically alongside CMU’s long-established, technically-oriented B.Arch program (most recent NAAB accreditation for six years in 2012). Much of the proposed M.Arch curriculum, particularly the last two years, will be cross-listed with existing B.Arch courses and studios, but offered with graduate sections or increased, graduate level expectations. The proposed M.Arch will also tie into SoA’s leading edge graduate MS/PhD programs and their research agendas in computational design, sustainable design, and public interest design, with students able to take courses in those other programs, and use them to cut the time and money needed for additional degrees. The M.Arch will provide both the broad, comprehensive training in fundamentals required for U.S. professional registration and licensure, and the opportunity to develop concentrations in these focus areas.

We have developed a comprehensive three-year curriculum to deliver all of the NAAB SPC (see section “II.2.2.B. Master of Architecture” below). As per the NAAB standards, our M.Arch graduates should be “competent in a range of intellectual, spatial, technical, and interpersonal skills; understand the historical, socio-cultural, and environmental context of architecture; are able to solve architectural design problems, including the integration of technical systems and health and safety requirements; and comprehend architects' roles and responsibilities in society.”

The proposed M.Arch is being developed for, and will be open to students with a baccalaureate degree in any field. All students will apply to the same program, though for foreign visa purposes, and to distinguish different backgrounds, the program will be offered as two tracks: 1) “Track 1” for students without a degree in architecture, who will generally study for 3 years; and 2) “Track 2” for students with a rigorous four year pre-professional architecture degree, who will be granted advanced standing, and be able to finish in 2 years. In order to capitalize on existing courses, faculty, and studio spaces from our B.Arch program, we will initially grant admission only to advanced standing “Track 2” students. The recently implemented “3+2” B.Arch curriculum, with the initial six semesters delivering most of the NAAB SPC, and the option studios in the final 4 semesters allowing students to explore broadly or specialize with an eye on their career, will make this overlap of B.Arch and M.Arch possible.

Similar to the existing SoA masters programs, as well as CMU more generally, we have received applications from around the world, from applicants with a diverse set of skills and backgrounds who seek out the increasingly well recognized CMU and SoA high tech and research-oriented programs. In order to
increase our domestic applicant pool, we have also begun to establish relationships with a series of “feeder schools” such as the BA in Architecture Studies program at the University of Pittsburgh.

The proposed M.Arch will remain strategically small and focused on the existing strengths of the SoA in computational design, sustainable design, and public interest design. The small size of the program will allow students to shape their individual educational and career paths, as they engage directly with leading edge research projects in the school, community and around the world. While being built on the existing strengths of the SoA, the new program will also challenge old norms and establish new, more future-oriented ways of working and teaching architecture. The plan below contains many features that we believe can be transferred readily from the B.Arch to the M.Arch, but also keeps an eye on changing fundamentally certain aspects of our professional education, both because teaching graduate students will be different than undergrads, and because the smaller, more streamlined three year curriculum allows us to implement change to a greater degree than has been possible for the larger, more established B.Arch.

**M.Arch Identity:** Given the extensive competition, and the M.Arch’s mandate to educate broadly, it will be important to establish and maintain a specific and focused identity for the program, to distinguish it from other schools, and from SoA’s research-based MS programs, and B.Arch. The four primary distinguishing features of the new M.Arch program are:

- **Pittsburgh: the City Everyone is Talking About** - Where better to study architecture than in a venerable city with both an industrial heritage and a tech-driven future? The buzz you’ve heard is true: one of the USA’s most livable, affordable, green innovation hubs provides the perfect home and laboratory for research, design, working and living.

- **Small Program Size** - Our small, focused program facilitates close interactions among faculty and students, easy access to our state-of-the-art research and fabrication facilities, and personalized learning and research. In our cohesive, immersive atelier-model studios and beyond, opportunities are enabled from the bottom up, rather than prescribed from the top down.

- **Integration of Arts and Tech** - One of the world’s preeminent technical research universities, Carnegie Mellon has long offered students leading-edge learning experiences at the intersection of the arts and technology—allowing them to create successful futures in careers only they can envision. In SoA’s M.Arch program, technology is more than a technique or tool: we emphasize digital workflows and the seamless integration of computation, systems analysis, and data into our creative design processes.

- **Integration of Design and Research** - M.Arch students are immersed in Carnegie Mellon’s and SoA’s long standing culture of research and design innovation. We relentlessly focus on excellent design and on scientific, research-based methods, forging transdisciplinary connections, speculations, and architectural solutions for the built environment. M.Arch students have access to a host of learning and research spaces, including the Intelligent Workplace, Computational Design (Code) Lab, Digital Fabrication Lab, and the Urban Design Build Studio’s PROJECT RE_.

**M.Arch Values:** In addition to the university’s core values of Dedication, Impact, Collaboration, Creativity, Empathy and compassion, Inclusion, Integrity, and Sustainability, the M.Arch program’s core values are based in:

- a deep conviction about the unique disciplinary knowledge of the architect, and the power of “architectural thinking” to improve both society and our planet

- a commitment to understanding and addressing the rapidly changing natural and man-made environment around us, and the increasingly complex, difficult, and inter-disciplinary problems and opportunities facing architects in our constantly evolving profession
a commitment to teaching and inculcating design thinking as an iterative, reflective decision making process to solve problems and discover new opportunities needed to be an influential professional;

a studio culture that promotes the values of speculation, critical thinking, and research that lead to innovative architectural solutions within the built environment

a relentless focus and insistence on good design; design excellence at the center of all work

the development of integrative design thinking within a collaborative studio environment, promoting understanding of the design process as the primary means of synthesizing many forms of expertise, knowledge and learning

an emphasis on future oriented, digital workflows and the integration of computation, systems analysis, and data into the creative design process so that computation becomes more than a technique or tool, it changes how we design, and in the process supports the collaboration and the exchange of knowledge among many programs and disciplines

a belief that architecture and technology must be understood as culturally constructed and shaped by social, aesthetic, historical, humanistic, and theoretical biases

A sample of the types of activities and initiatives that demonstrate the program’s benefit to the institution through discovery, teaching, engagement, and service.

One of the key goals of the new M.Arch is to improve the architectural culture in the region around southwest Pennsylvania and the City of Pittsburgh. The new M.Arch program will make it possible for Pittsburghers who did not study architecture in college (including CMU students from other departments on campus), or for Pittsburghers who studied architecture at a pre-professional level elsewhere, to start or continue their studies at the highest level here in Pittsburgh. We hope they will choose to stay to contribute to the revitalization of the region. We have reached out to the University of Pittsburgh, as well as Chatham University to have their students apply, and we have seen many inquiries from people already working on local offices, but wanting a professional degree.

The impact and reputation of CMU’s SoA is related to its ability to motivate sophisticated student work, both design and research, and to innovate, both pedagogically and technically. Attracting excellent new and diverse graduate level students to the design program should raise the profile of the SoA. A new M.Arch should improve SoA’s overall stature, competitiveness, and rankings, in the educational and professional communities, in the Pittsburgh region and around the world, particularly at the graduate level, given its traditional emphasis on STEM based research. We are eager to strengthen studio and design culture by attracting top quality students with educations from other domestic and foreign schools, and promoting connections of B.Arch and M.Arch students through shared studios and coursework.

SoA’s long standing community and outreach programs include Architecture Explorations, the Pre-College Architecture Program, the Urban Design Regional Employment Action for Minorities Program (UDream), the Architecture Building Communities summer camps at the Carnegie Museum of Art, and the Osher Academy of Lifelong Learning have long reached out to the city and region.

In Pittsburgh, faculty and specific programs maintain close connections to the Heinz Architectural Center at the Carnegie Museum of Art (CMoA), the University of Pittsburgh’s Department of History of Art & Architecture, the Mattress Factory, Pittsburgh’s Department of City Planning, the Heinz Endowments, the R.K.Mellon Endowments, the Master Builders Association, the Trade Institute of Pittsburgh, the Energy Innovation Center (EIC), the Green Building Alliance, and Phipps Conservatory.

Globally, our faculty conduct international workshops for organizations such as the Singapore Building Construction Authority, East China Architectural Design Institute, and the Guangdong Electric Power
Design Institute.

A summary of the benefits derived to the program from the institutional setting.

IDeATe: The Integrative Design, Arts and Technology Network (IDeATe) at Carnegie Mellon University connects diverse strengths across CMU to advance education, research and creative practice in domains that merge technology and arts expertise.

The IDeATe concentrations aim to train a student to be excellent in one area of technology or arts and be able to collaborate within diverse cohorts of technology and arts experts. To achieve this goal, IDeATe has sponsored the development of 30 new interdisciplinary technology-arts studio based courses. These studio classes are focused on hands on collaborative learning and are structured to combine students from many different disciplines. The curriculum is being developed and delivered by 65 faculty across 15 different academic units of CMU and being delivered at the new IDEATE collaborative making facility housed at the central Hunt Library.

A description of how the program’s course of study encourages the holistic development of young professionals through the integrated study of the liberal arts and the specific discipline of architecture.

CMU’s new M.Arch is built from an ethos of combining professional training and interdisciplinary education that is at the heart of our university, the B.Arch, and the post-professional master's programs in the SoA. We do not currently anticipate admitting students from CMU's own SoA, thereby adding to the diversity and experience of our community. Candidates for CMU’s M.Arch require a previous baccalaureate from an accredited institution, where we anticipate they will have pursued a broad, interdisciplinary undergraduate studies before applying in order to develop critical thinking about architecture’s rich and complex connections to other fields. The admissions process seeks to attract candidates from a variety of degree programs (liberal arts and pre-professional) and previous experiences, including non-traditional backgrounds, with a passion to study architecture. By bringing together a diverse cohort, we seek to lay the foundations for them to teach and inspire each other to understand a larger diversity of ideas, inspirations, and means of engagement within the world through architecture.

Similar to the 3+2 curriculum of our B.Arch, the new M.Arch will focus on professional and technical coursework in the first years, and then offer a choice of Advanced Option Synthesis Studios (ASOS) in the last year. Here M.Arch students are integrated with students from other design-based programs, including perhaps an optional 1-semester Thesis, and are taking a slate of electives to support their studio or other areas of interest. Students can choose between focusing within the traditional aspects of the discipline, or working in interdisciplinary or non-traditional topics, including coursework towards STEM-based masters programs in areas such as urbanism or sustainability. The small program and careful mentoring allows students to determine their own path through the M.Arch, at the same time as the school assures the holistic development of young professionals through the integrated study of liberal arts and the specific disciplines of architecture.

1.1.2 Learning Culture

In addition to the matters identified in the Condition, the program should be prepared to describe how studio culture addresses the values of time management, general health and well-being, work-school-life balance, and professional conduct. A description and assessment of the learning culture within the program.

The learning culture of the proposed M.Arch program will be built from the learning culture that has been promoted in the B.Arch program, as well as the SoA, and the university more broadly. CMU’s “2025 Strategic Plan” states: “the university is committed to cultivating an active, technology-enhanced, “know how to learn” environment where each individual can grow and thrive…. We will remain dedicated to nurturing student, faculty, and staff growth in key areas such as deep disciplinary knowledge: leadership, communications, and interpersonal skills; as well as physical and emotional well-being. We will continue our focus on attracting a diverse and inclusive community of students, faculty, staff, and alumni willing to
cross academic boundaries in a culture where innovation, entrepreneurial thinking, and action are valued and fostered.”

The relatively small size of CMU, of the SoA, and of the proposed M.Arch program, as well as a culture that promotes both interdisciplinarity and collaborative research, allows us a great deal of personal contact from faculty to students, and from students in one grad program to the other, and even from one department to the next. Students are constantly interacting with each other, as well as with faculty and staff in studios, but also in labs, classrooms, offices, as well as on the campus, in the Pittsburgh neighborhood nearby, as well as further afield on study trips. Studios and classes frequently engage experts from outside the school, from the Pittsburgh area, and from farther away to deliver guest lectures, review studio projects, or interact in other professional ways with students. We strive to create a friendly, respectful, collaborative, and professional relationship across the entire community, from students to faculty to staff.

The learning culture in the studios is guided by the “Studio Culture Policy,” (described below) but also by the values of the community we seek to build in the SoA and at CMU, and constantly reiterated by the upper administration. In both freshmen and graduate student orientation, faculty and staff outline the expectations and opportunities of the SoA curricula, but also the support services that are accessible through faculty and staff, SoA advising and mentoring programs, and especially university led support services. Both the university and the School encourage instructors to include messages about health and wellness, but also about support services in all syllabi, and introductions to all courses. Learning culture policies are introduced and outlined to all students through various course and programmatic offerings in the SoA, including the First Year Seminar course, individual and group academic advising sessions for all current students, semester Ice Cream socials, semester town meetings, and special topic sessions as needed. Participation and engagement in these sessions are measured and evaluated to continually improve performance, delivery, and opportunities. Architecture students in the early part of the curriculum are guided in how to navigate not only their academic work, but also the many opportunities that come with being a college and graduate student. In studios, this includes issues of time management, finding ways to become “unstuck,” managing between multiple design parameters and different feedback, teaching about collaboration and team building, and other tactics to help students become successful professionals.

All CMU students have access to the learning and support services such as:

  Academic Coaching ([https://www.cmu.edu/acaderv/programs/counseling/index.html](https://www.cmu.edu/acaderv/programs/counseling/index.html)) that covers topics such as time management, effective work and study technique, etc. It also helps set up peer tutoring, and other supplemental instruction

  Global Communications Center ([https://www.cmu.edu/gcc/](https://www.cmu.edu/gcc/)) a resource supporting students’ efforts to improve their communication skills and prepare for a complex global economy

  Intercultural Communications Center ([https://www.cmu.edu/icc/](https://www.cmu.edu/icc/)) to help non-native English speakers (NNES) improve the language and cultural skills needed to succeed in their academic programs

  Counseling and Psychological Services (CaPS) ([https://www.cmu.edu/counseling/](https://www.cmu.edu/counseling/))

  Student Health Services ([https://www.cmu.edu/health-services](https://www.cmu.edu/health-services)), including wellness and fitness initiatives

A description of the program’s Studio Culture Policy including By what means and how frequently the policy is distributed to faculty, students, and staff

The official policies and aspirations of the learning culture, including the “Studio Culture Policy” (SCP), serve as supplements to the standards and policies that the university has adopted and established, and are described in The WORD ([https://www.cmu.edu/student-affairs/theword/](https://www.cmu.edu/student-affairs/theword/)), the official handbook for
members of the CMU community. The SoA’s learning culture, alongside SoA mission, academic curriculum, academic policies, student opportunities, and valuable resources in SoA are detailed in the undergraduate and graduate student handbooks. The university ethos and policy states in part:

“Carnegie Mellon is a community of diverse members committed to maintaining an environment that encourages personal and intellectual growth that promote our traditions of innovation, leadership, responsibility to society, learning, dedication, commitment to quality and commitment to each other. We are a community with high standards and high expectations for those who choose to become members, including established community standards intended to foster behavior that is consistent with a civil and educational setting. It is the responsibility of each community member to become familiar with the standards and expectations of the Carnegie Mellon community.”

The Carnegie Mellon University School of Architecture’s Policy on Studio Culture has been written by the school’s chapter of the American Institute of Architecture Students (AIAS) to build a strong community that is inherently unique to the architecture studio environment. It is available to all in the student handbook. In the SoA “Studio Culture Policy”, and indeed through the SoA, the philosophy is maintained that professionalism should be embodied by faculty, staff, and students and demonstrated in the work exhibited in a professional degree program. The SoA realizes that the studio is a ‘melting pot’ of sorts that contains these interactions and their outcomes. Therefore, as a premise for deriving the guidelines for studio culture, we embrace the idea of professionalism as means to instill positive and productive relationships between all parties present in architectural education. Under the heading of professionalism, the SoA supports core values that further emphasize the importance of collaborative engagement, critical interaction, and decision making within the studio environment:

**Critical Practice:** Innovate, question, reevaluate, and redefine in order to push for forward thinking in the study and practice of architecture.

**Process/Product:** Demonstrate the ability to actively participate in studio by creating work that challenges oneself in his/her specific skill-set level. Contribute – to the best of one’s abilities – a product that is well-developed based on the conceptual objectives assigned.

**Critique:** Promote constant interaction between students and faculty in the critical discussion of both precedent study and student. Engage in public discourse about architecture whether it be at a personal final critique, a gallery showing, or a town hall meeting.

**Engagement:** Understand and be committed to studio content, and take advantage of resources. Work to achieve personal and academic goals in an effort to learn more from your work and that of your peers. Be present at every studio session as attendance and attentiveness are essential to success.

**Communication:** Voice suggestions, concerns, and opinions frequently. Have the judgement to understand on what level to communicate with peers and colleagues in all areas of architectural learning.

**Respect:** Be respectful of others - their ideas, work and philosophies. Embrace the diversity of our community with regard to: race, color, national origin, sex, handicap or disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information.

**Integrity:** Commitment to honesty without compromise, as well as truth without equivocation and a willingness to place the good of the community above the good of the self. Obligations, once undertaken, must be met and commitments kept. Official policies on academic integrity, including cheating and plagiarism are outlined in The Word.
Keeping in mind the overarching theme of professionalism, the official Studio Culture Policy sets forth in great detail the guidelines for the development of the curriculum, the grading policy, the crit and review policy, and the responsibility of the design process. It also sets forth expectations for professional student-faculty interactions, student-student interactions, as well as expectations about the conduct in various SoA facilities.

An assessment of the level to which faculty, students, and staff understand the purposes for which the policy was established

B.Arch students are introduced to the School’s policy on studio culture during orientation and in first semester seminar* as a part of the School of Architecture policy review. In seminar, students are quizzed on policies including the studio culture policy. M.Arch students will be introduced to the SCP during August orientation and encouraged to make revision. The Track-Chair for the M.Arch program, who will be mentoring and supervising the curricular progress of all M.Arch students, will

A description of the process by which the policy is evaluated and updated, including those involved and the frequency of the review.

The Executive Board of the Carnegie Mellon chapter of American Institute of Architecture Students (AIAS) developed the studio culture policy in collaboration with the School of Architecture Head and AIAS staff advisor, and are responsible for assessing and updating the policy, in collaboration with the Student Advisory Council (SAC) and the Head of SoA. Student handbooks, both undergraduate and graduate versions, which contain the Studio Culture Policy, are made available to all students/faculty/staff via online and print versions, are evaluated through feedback from the SoA faculty, staff, and student advisory council (SAC), and updated annually.

I.1.3 Social Equity:

A description of institutional initiatives for diversity and inclusion and how the program is engaged in or benefits from these initiatives

Closely related to policies and aspirations for a positive learning culture are those related to guaranteeing social equity. The policies and aspirations related to social equity for the proposed M.Arch program will be built from the policies promoted in the B.Arch program, as well as the SoA and CMU more generally.

Since beginning his term in 2013, CMU President Suresh has made it a top priority to improve the quality of life for all members of the CMU community, especially in matters of physical and mental health, equity, and inclusivity. CMU's new strategic plan includes 8 “values”, of which three relate specifically to social equity: Empathy and compassion, reflected in our focus on improving the human condition and on the personal development of the members of our community; Inclusion, reflected in a culture and climate that seeks, welcomes, and advances talented minds from diverse backgrounds; Integrity, reflected in our adherence to the highest ethical standards in personal and professional behavior and in our commitment to transparency and accountability in governance and everything we do. The SoA and the proposed M.Arch program aspire to the same values.

CMU is committed to Equal Employment Opportunity and Affirmative Action (EEO/AA). The SoA is committed to the university’s diversity efforts as published in Report of the Diversity Advisory Council January 2013. Specifically, the SoA supports the diversity of our students, faculty, staff, and community through a variety of efforts related to student admissions, faculty recruitment and staff recruitment.

A description of plans to maintain or increase the diversity of faculty, staff, and students when compared with the diversity of the institution.

Under CMU President Suresh, the University has created a fund to help attract and retain the very best candidates in under represented groups, as these are becoming harder to attract with increased global competition. For students, the University has created a program of “Presidential Scholarships” for undergraduates and “Presidential Fellowships” for graduate students. These are intended to attract the very best graduate students from around the world, including underrepresented groups.

The SoA has been very successful in recruiting and enrolling the number of women in the undergraduate
program to the point where women have been the majority in all recent classes, and are always among the top students. The required portfolio reduces the emphasis on test scores and other admissions tools that often work against underrepresented groups. For applicants who do not have a strong background in art of making, SoA has recently created a carefully scripted “Design Project” as a substitute for the portfolio.

The SoA offers four (4) programs to support our efforts to improve diversity

Architecture Explorations: A collection of programs for K-12 students reaches a wide range of students in an effort to develop interest in architecture and prepare interested students for undergraduate admission. The Saturday Program offers significant need-based scholarships to individual students. Academic workshops and after school programs serve a range of schools, including several schools with a majority of the student body eligible for the federal free- and reduced-fare lunch program. Architecture Building Communities, a free architecture and urban design summer program, reaches out to a local urban primary school and recruits diverse high school student from the region.

Pre-College: Each summer, the university sponsors through full tuition, room and board, four or five diversity students into our six-week intensive Pre-College program. Upon the expression of a student’s interest and ability, we will provide supplementary information in the form of recommendations, to the Office of Admissions to promote enrollment. The SoA has admitted and matriculated several of these students.

UDream: (Urban Design Regional Employment Action for Minorities) provides recent graduates of architecture, landscape architecture, urban design and urban planning programs the opportunity to deepen their knowledge of urban design in a summer and fall immersion experience in real project in a Pittsburgh neighborhood. Participants receive free tuition, housing, bus passes, and a monthly stipend of $1,000 for food and necessities from June to October. UDream begins in June on the Carnegie Mellon University (CMU) campus with a five-week intense program of academic courses and studio work with an emphasis on urban design and sustainability, followed by a two-week mentoring program in July with local high school students. Senior CMU architecture faculty and experienced local urban design practitioners teach the courses and design studio. The academic and community engagement program is followed by a twelve-week internship at an urban design firm, public agency, or nonprofit organization engaged in planning and community development. The goal of UDream is to increase diversity in the profession of urban design nationally, and in the Pittsburgh region specifically, by offering opportunities for permanent employment in Pittsburgh. In 2009 there were only five practicing minority architects in Pittsburgh. Now there are well over thirty.

National Organization of Minority Architects: The UDream participants formed a new chapter of the National Organization of Minority Architects (NOMA) in Pittsburgh and a new student NOMA chapter at CMU. Ten graduating architecture students from around the country have been accepted for Year Eight starting in June 2016.

A description of the process by which these plans are developed and the individuals involved in the process.

The Associate Head, Mary-Lou Arscott has been instrumental in creating a committee structure within the school that seeks input from the faculty, staff and students on issues ranging from outreach to culture to awards. On an as needed basis, the head convenes faculty search committee with a diverse membership to assess needs, post job advertisements and to recruit new faculty at various ranks within the school. These efforts are directly supported by the Carnegie Mellon Human Resources and Compensation departments.

A description of whether and how these initiatives are linked to the program’s self-assessment or long-range planning.

Long range planning is informed by the NAAB accreditation process, the Carnegie Mellon Presidential
Advisory Board process, by the STEM- and Studio- based committees, the Full Time faculty and feedback from alumni and those firms that hire our graduates at all levels for the school.

I.1.4 Defining Perspectives

The perspectives offer programs the opportunity to define the means and methods most appropriate to their mission, history, and pedagogy to prepare students with a set of core values that are essential and fundamental to the practice of architecture. These values are held as perspectives instead of SPC, as they must transcend any one course and must be over-arching across the program. Notes on the Perspectives should include:

- A description of the program’s approach to each of the five perspectives.
- Identification of individual courses, curricular and co-curricular activities, or learning experiences/opportunities available to students to develop the knowledge, skills, or understandings described in each perspective.
- A description of how the perspectives inform or support some or all of the following activities (not inclusive): Learning culture; Curriculum design, review, and development; Specific course review, development, or revision; Off-campus, extracurricular, or co-curricular learning experiences (e.g., field trips, service projects, student organizations, or design centers); Long-range planning for the program; Self-assessment activities for the program.

A. Collaboration and Leadership

The program should address this perspective by describing how students develop the interpersonal skills for fostering team unity, communication and decision-making, conflict resolution, cultural awareness and empathy, and the motivating purposes to effectively achieve commonly held goals, and where those skills are being taught/demonstrated. Graduates should be prepared to function in a diverse world of practice with the ability to adapt to complex team situations and effectively address a climate of shifting priorities. This perspective also includes how a program prepares emerging professionals to serve clients and the public, engage allied disciplines and professional colleagues, and rely on a spectrum of collaborative skills to work successfully across diverse groups and stakeholders. This condition can be satisfied by demonstrating how students lead and collaborate across multiple opportunities ranging from structured coursework opportunities to program activities and events and external programs and events.

Collaboration, and with it the opportunity for leadership but also the importance of being a responsible partner or teammate, are at the very core of the new M.Arch, the SoA, and CMU more generally. The university’s strong culture of interdisciplinary thinking, communal inquiry, and collaborative research across the disciplines foregrounds these values from the top down. As a school we value initiative in our students, and strive to create opportunities for them to shape their own education, both individually, and through collaboration, to become leaders in the community. SoA students lead and organize strong chapters of the American Institute of Architecture Students (AIAS), as well as the National Organization for Minority Architecture Students (NOMAS). The AIA awards the Alpha Rho Chi medal for student highest level of leadership.

At both the undergraduate and graduate levels, students are encouraged to pursue courses in other departments, promote interdisciplinary agendas, collaborate in joint research projects, seek outside advising, etc. The M.Arch curriculum and program explicitly promotes M.Arch students taking courses and engaging with other STEM-based graduate programs in the SoA to develop expertise in addition to the professional degree. The relatively small size of the SoA, as well as the proposed M.Arch, allow students direct access to leading experts in the field and all the advanced facilities, as well as a great deal of latitude in determining their education.

We see the architectural studio not just a place, or a course, but also a collaborative way of learning and thinking. In a recent renovation we tore down walls separating studios in order to promote more interactivity between studios, students, and instructors. We are in the process of phasing out separate computer clusters, in part to integrate that workflow more seamlessly into the studio culture. Although the academy has often foregrounded the experience of the individual learner, and the master-apprentice model of studio education has long been a staple of architectural education, SoA aims to move towards other more collaborative models of learning and teaching, practicing and researching. Nearly every studio contains group projects, as well as individual ones. Although it is often difficult for students, an explicit part of the pedagogy includes collaborating in the design process, effectively achieving commonly held goals, conflict resolution, sharing work, responsibility, and success.
An embrace of diverse viewpoints and community engagement is an explicit part of several studios and courses, including the 2nd year studio on urban agriculture, the “Context and Case Studies” course that gets students out in the community, as well as “Human Factors” course. The Urban Design Build Studio (UDBS) is focused the idea of “Public Interest Design,” and includes extensive work with local tradesmen, residents and community leaders, often from disenfranchised communities, as well as grant agencies. The Master of Urban Design program, which helped establish the practice of participatory design, as well as the urban focused studios in the ASO studios almost always feature close collaboration with many different stakeholders in the community. The larger ethos of sustainability that is a core value of SoA encourages students to understand all things as part of larger systems and ecologies that are interdependent, and thus the architect or any one person or group as just one of many participants in a larger process of enacting change, at any scale.

The collaborative team approach also extends to teaching: the first six studios are all organized by a full-time, tenure track coordinator, who leads other instructors in ways that allow students to recognize both leadership and shared values and ideas. In the freshman year, the spring studio includes team-teaching, where students are taught by a team of three equal co-instructors, and thus learn to balance different kinds of feedback. In several studios, including the “Advanced Construction” studio and the planned “” studio for the first year M.Arch curriculum, consultants from the profession, community, or SoA are brought in and integrated into the teaching to help students understand the value of different expertise in our collaborative profession.

Financially and administratively, CMU strives to promote a “bottom up” approach to initiating projects and developing leadership in specific, strategic areas of focus. The administrative and financial structures of the university grant great autonomy to the Head of SoA about programs and financing, allowing faculty of the School to initiate many new projects, often including students. The university provides small grant programs for undergraduates and graduate students to initiate both individual and collaborative research and educational projects, including Graduate Small project Help (GuSH) Research Grant, Graduate Student Conference Funds, student taught courses (StuCo), and university-wide student-run interdisciplinary events such as “Lunar Gala” fashion and design show. Architecture students are included in many aspects of the administration and business of the school. They are part of the admissions process, and through the “Student Advisory Council” (SAC) have direct access to the Head, and can demonstrate both leadership and collaboration as we work together to improve the SoA, or enable all manner of projects.

B. Design

Programs should describe how graduates are prepared to engage in design activity as a multi-stage process aimed to address increasingly complex problems, and provide value and an improved future. This includes how students learn the combinations of methods, skills and cognitive processes, as well as identifying and framing problems from a complex milieu; generative and evaluative strategies; cycles of conjecture, implementation and evaluation; methods of research, technical expertise, skillful action and judgment.

Design is at the forefront of the core values of the M.Arch program, with: 1) a deep conviction about the unique disciplinary knowledge of the architect, and the power of design and “architectural thinking” to improve both society and our planet; 2) a studio culture that promotes the values of speculation, critical thinking, and research that lead to innovative architectural solutions within the built environment; 3) a relentless focus and insistence on good design; design excellence at the center of all work; 4) the development of integrative design thinking within a collaborative studio environment, promoting understanding of the design process as the primary means of synthesizing many forms of expertise, knowledge and learning; 5) a commitment to teaching and inculcating design thinking as an iterative, reflective decision-making process to solve problems and discover new opportunities needed to be an influential professional; 6) an emphasis on future oriented, digital workflows and the integration of computation, systems analysis, and data into the creative design process so that computation becomes
more than a technique or tool, it changes how we design, and in the process supports the collaboration and the exchange of knowledge among many programs and disciplines.

The new M.Arch program was created as part as an larger effort to make “Design” more central to the mission of the SoA. Although CMU has been training professional architects for over a century, always with design as the center of their expertise, SoA’s graduate programs, some of the oldest and respected in the country, have focused more heavily on research into technical, scientific, and STEM-based areas of the discipline. As a result, the SoA recently reorganized its graduate program structure to acknowledge the different attitudes towards design, distinguishing the STEM-based graduate programs (MSSD, MSBPD, MSCD, MSAECM, MSTID), from the Studio-based programs (M.Arch, MUD, MAAD).

Another major curricular reorganization involving turning from a sequence of 10 themed studios from beginning design to urbanism for the B.Arch, to one based on design thinking: year 1 is “Foundation,” year 2 is “Integration,” and year 3 is “Elaboration,” part of which is the “comprehensive design” studio. In the last two years the students choose from a suite of vertically integrated “Advanced Synthesis Option Studios” (ASOS) in the last two years. The 3-year M.Arch will use the same sequence, working through Foundation and Integration in the first year, using an “atelier model” for design instruction. In place of the typical 18-unit (6 credit-hour) introductory design studios taught in parallel with separate support courses, we have created a comprehensive 48-unit (16 credit-hour) studio: in effect, all studio, all the time. The atelier studio combines and integrates studio design instruction with the closely related content from history/theory, computing/representation, and materials/construction. Underlying this design pedagogy is our conviction that design is best learned through projects in which many kinds of knowledge and thinking are integrated into a constantly iterative process of action and reflection.

The suite of ASOS studio offered each semester integrates upper level B.Arch students with students from each of the graduate studio based programs: urban design (MUD), advanced design (MAAD), and the M.Arch students, beginning to simulate office teams where people with varying backgrounds and expertise work together towards shared design goals. The new M.Arch thus stands poised to bridge between the deep roots in professional architectural design established by the B.Arch, and the more research and lab-oriented STEM-based grad programs, but also tie into the culture of innovation and entrepreneurialism that is at the heart of the CMU brand. It also provides a flexible forum to accommodate M.Arch students of varying backgrounds, interests, and future career ambitions to prepare them for the architecture profession, but also many allied fields involving design and systems thinking.

C. Professional Opportunity

As programs reflect their approach to preparing students for traditional settings responding to this perspective includes how students are prepared for the transition to internship and licensure; with an understanding of the requirements for registration in the jurisdiction in which the program is located; and with the information needed to enroll in the Intern Development Program (IDP). For programs with students preparing for other-than-traditional settings this should include how programs develop students’ understanding of alternative roles for architects in the building industry (e.g., developer, owners’ representative, program manager, or civic leader), as well as roles in numerous other disciplines where architectural expertise is highly valued.

CMU and the SoA have been educating architects for the profession for over a hundred years, and remain committed to doing so. Training the next generation of professionals for industry and practice was at the heart of Andrew Carnegie’s vision for the school, and continues to be central to the mission of SoA and CMU more generally. Both seek to have a real, transformative impact on society through continual innovation and the solutions of real problems in education, research, creativity, and entrepreneurship. The M.Arch program was created in part to strengthen the professional architecture community in the region and the City, to encourage and enable more people from the area to study architecture, and by educating older, master’s level students, have a better chance of retaining them in Pittsburgh. The local AIA has been an enthusiastic supporter of the new degree.

Every studio at Carnegie Mellon focuses at least on project on buildings and the professional architectural
design process. The “Human Factors,” “Materials & Assembly,” Professional Practice,” “Real Estate,” and “Ethics” courses all take as their primary subject matter the requirements of the profession and licensure. Many of the studio teaching instructors are professional architects from the community who not only teach design and offer feedback, but help inculcate a sense of professionalism in the studios and work. In recent years we have also made a conscious push to create new special faculty with the position of “Studio Professor,” as well as tenured a full-time professional architect, all of whom bring relevant, current professional experience to our students.

Although the B.Arch and many of the master’s programs were built to provide education and innovation for the traditional architecture profession and building construction industry, we find that an increasing number of our students are interested in pursuing interdisciplinary work here at CMU, as well as after they graduate. In addition to the architecture profession, recent graduates have gone on to work for software companies, fabrication facilities, entertainment technology companies, government jobs, and have chosen to pursue further studies in graduate programs in urbanism, landscape, computational design, and more general design studies.

Students are encouraged to look for internship and employment opportunities that can make use of their skills already after the first year. Alexis McCune Secosky is the SoA staff person responsible for helping students understand and then engage in the “Architectural Experience Program (AXP), as well as the steps to licensure. She covers those in 1st year seminar, and continually solicits the attention of students through career fairs, a newsletter with job opportunities called “Opportunity Knocks,” as well as forging close alliances and connections with the CMU Career Center, where a specialist also works with architecture students. Although we do not offer a guaranteed job placement program, the SoA has created a series of arrangements with prestigious firms such as SOM, KPF, Payette and others to take one or more current CMU students for summer internships, which often translate into employment after graduation. In recent years nearly all grads have been able to find employment readily in the profession of area of their choice.

D. Stewardship of the Environment

This includes teaching design practices that seek to minimize negative environmental impact and to connect people with the natural environment. The program’s approach may also include individual courses that develop a student’s understanding of climate, geography and other natural characteristics and phenomena. Further, these courses may also include content on the laws and practices governing architects and the built environment as well as the ethos of sustainable practices. Finally, the program’s approach may also include opportunities for students to engage in political advocacy on environmental issues; involvement in organizations for a sustainable future; or participation and leadership in university initiatives supporting environmental awareness and sustainability.

CMU SoA has been a world leader in research, teaching, and practicing sustainable design in architecture and urbanism around the world for over four decades. We see the architecture’s complex relationship to energy and natural resources as perhaps the single most important issue facing our planet and civilization. Our design studios, at both the graduate and undergraduate levels, all understand sustainability as a basic premise for all building and planning, and are eager to promote and support innovation and speculation in the field. Our graduate PhD and masters programs in Building Performance & Diagnostics (BPD) and Sustainable Design (SD) have long led the world in advanced building technologies that sustainably reshape the built environment. “Sustainability” was our passion and expertise long before it became a buzzword. Graduate students in our sustainability-focused programs work side-by-side in the Robert L. Preger Intelligent Workplace, benefitting from one another’s experiences—but those experiences are specialized and distinct.

Graduate programs at CMU are characterized by international students and, within the SoA by a blend of national and international faculty. This rich mix heightens the awareness that sustainability is contextual. The varying distribution of natural resources and human populations around the globe requires that designers have the ability to think critically about sustainability in context and to design sustainably in that context. The University and the SoA understand that rapid global development, ongoing population
increases and the concomitant pressures on natural resources and atmospheric health mean that today’s students will face different and perhaps more intense challenges than we do today. As a result, faculty within the SoA and across the campus strive to heighten students’ understanding of the interaction between human development and the environment and to hone critical analysis and solution-seeking skills.

Overall, the faculty within the SoA approach sustainability within the broad categories found in US and global building rating systems, examining the interplay between buildings and the environment with respect to transportation; the physical site, its environmental qualities and future potential for flooding; water resources; materials use, durability and disposal; energy resources and their carbon intensity; and indoor environmental quality. Quantitative and qualitative analysis of the current built environment is emphasized through the use of increasingly affordable meters, sensors and intelligent controllers. The use of software, for community mapping, for integrated design and building performance modeling, and for system performance feedback and control are emphasized. Because US building codes are moving toward zero energy capable buildings, these codes are introduced, but these codes are also compared with code requirements, or their absence, in other countries in which students are likely to live and practice.

The Master of Science in Sustainable Design program is a post-professional degree intended for recent graduates and practicing professionals who seek to gain expertise in sustainable design methodologies and return to professional work in a short time. This intensive 12-month curriculum stresses the importance and value of total-building performance, human-centered design and the integration of Design, Technology and Construction knowledge and experience. Classes provide both depth and breadth, while the culminating Synthesis Project allows each individual student the opportunity to narrow his or her research focus to a topic of personal interest. M.Arch students will have access to these same classes, and the opportunity to get a head start on an MSSD degree.

The Building Performance & Diagnostics degree program is intended for practitioners, researchers, and educators in architecture and the building industry who wish to be leaders in advanced building technologies and their performance. It is a research-based and research-oriented program, best for those ultimately interested in pursuing a PhD in building performance.

In the B.Arch and M.Arch professional programs, fundamental principles of “Building Physics” are introduced in a first year course that helps students understand, simulate, and begin to draw design principles around issues of heat and light. Ideas about ecology and nested systems of environments, both natural and human, are introduced in the second year. Two “Environmental Science” courses are required, one focused on passive systems and mostly at a smaller scale, the other on more technical advanced systems integration in larger scale buildings. The 3rd year required studio (taken in the 2nd year for M.Arch students) “Integration I: Environment, Form, and Feedback,” focuses on systemic design thinking linked to the development of forms and organizations in large scale urban environments. Engaging processes such as climate data, daylighting and water flow, students move away from the design of discrete buildings toward architectural interventions that spans across scales to give new shape to the contemporary city edge. The “Advanced Construction” studio that follows, is concerned with advanced systems integration, and focuses heavily on building performance. Students have the chance to deepen their expertise in the sustainability or urban ecology based ASOS studios that focus on such issues as urban resiliency and energy sustainability.

E. Community and Social Responsibility

The social responsibility of architects lies in part in the belief that architects can create better places, and further that architectural design can create a civilized place by making communities more livable. A program’s response to social responsibility must include nurturing a calling to civic engagement to positively influence the development, conservation or changes to the built and natural environment. Addressing this perspective could include examples of public and community projects/programs outside of coursework, or as structured elements within coursework.
We see “Public interest Design” as one of the three core strategic strengths of the SoA, alongside computation and sustainability. At the core of this philosophy is a belief that architects must serve the interests of the general public, the local community, and the specific clients and users of the project, and furthermore that the design process must include them as well as other major stakeholders in identifying problems and needs, in proposing new solutions and working out compromises in the decision-making process, and where possible, be involved in the implementation and even construction of the architectural or urban project. Only through this participatory process will the public interest truly be served.

The proposed M.Arch program will build on the long tradition and values of community engagement and social responsibility within the SoA. The CMU SoA helped pioneer the practice of “participatory design” and community engagement in the design process as far back as the 1960s, when Prof. David Lewis began one of the first programs in urban design at CMU. Since then, through a now defunct PhD program, the long standing Master of Urban Design (MUD), as well as decades of required coursework and studios in the B.Arch curriculum, this ethos of public interest design has been at the core of our professional architecture education at CMU. Our programs have always considered the City of Pittsburgh as well as the surrounding communities and region to be an “urban laboratory,” where new and established methods can be practiced in collaboration with local citizens and organizations.

One of the principal goals of the new M.Arch program is to improve the architecture and design culture and community in the region by attracting more architects to the area and helping find opportunities for them to stay and build our region. In the admissions process, applicants previously from the region, or who already live and go to school in the region and the State, were given special attention, to be sure we had a cohort of students with enough local knowledge and expertise to share with the entire class and maximize the opportunities of working and living locally.

Almost all studios in the core studios of the SoA feature sites in and around Pittsburgh to be sure that students visit and think concretely about the impact of architecture on the community. Freshmen year students now take a course introducing them to, and helping them learn to “read” the many diverse neighborhoods of Pittsburgh in a sophisticated, and community-oriented manner. The required survey of world history course is based on the idea that architecture is but one expression and output of community and human habits, and students learn early to see architecture as culturally constructed. Our B. arch students are currently exposed to the principles of public interest design as early as the 2nd year studio, where they work on projects related to urban agriculture at several scales, and engage directly with the community. Students design and fabricate a small “hoop house,” or miniature greenhouse for local community gardens, and interact with the community both to understand their needs, and to evaluate the work.

A central part of CMU SoA’s work in public interest design occurs through the Urban Design Build Studio (UDBS), a collaborative of students, professors, and allied professionals who work with community residents on implementation of appropriate, affordable, replicable design solutions. The UDBS has established Project_RE, an off-campus work and meeting space within the facilities of “Construction Junction,” a large architectural salvage operation that works with communities to save and recycle the heritage of Pittsburgh’s communities. Through grants from Pittsburgh-based foundations, UDBS and Project_RE have been able to garner substantial funding to design and build an ever increasing list of projects in various communities around Pittsburgh, always in collaboration with the local community, and always with the best practices of public interest design.

The UDBS approach to public interest design and architectural practice will also be central to the new M.Arch. Track-2 students will have the opportunity to focus their first year studios in the UDBS through a house studio in their first semester, a collaborative studio to produce construction documents for a house in the spring, and then a paid summer internship to construct a real house in a local community over the summer. Eventually this UDBS approach will be used in the “Atelier model” education of the first year of
the 3-year M.Arch.

I.1.5 Long-Range Planning

The APR must include:

A description of the process by which the program identifies its objectives for student learning

A description of the data and information sources used to inform the development of these objectives.

A description of the role of long-range planning in other programmatic and institutional planning initiatives.

A description of the role the five perspectives play in long-range planning.

With the arrival of CMU President Suresh in 2013, the university undertook a strategic planning which solicited ideas from all the major constituencies in the university. The results are described in section “I.1.1.A. Carnegie Mellon University (CMU)” above.

The last long range strategic plan for SoA was issued in 2012, in time for the NAAB review and accreditation process that same year that resulted in a 6-year term of accreditation.

The planning process was long and thorough. In 2008 both the University and the College of Fine Arts (CFA) undertook rigorous strategic planning processes, in which SoA faculty participated and which in turn helped focus our strategic thinking going forward. These larger planning efforts overlap with ongoing discussions about the direction of the SoA from within. In 2009 the Head initiated a “Curriculum Committee” to discuss and solicit a wide range of proposals on revising the curriculum. Faculty from all parts of the SoA submitted proposals that ranged from the radically new, to subtle alterations of the existing curriculum. This led to continued dialogue about the future direction of the SoA. In the spring of 2010, the Head hired the firm of Dewey & Kaye Nonprofit and Foundation Consultants, to help lead a rigorous, strategic planning process for the 1st professional degree program with a five-year horizon. A committee of three tenured faculty, two tenure-track faculty and two staff was selected to form a “Strategic Plan Drafting Committee.” The charge of the committee was to do extensive research and a SWOT (strengths, weakness, opportunities, threats) analysis of the SoA’s first professional degree and the external environments and to draft a strategic plan that would be constantly vetted with the overall faculty.

The drafting committee spent the fall semester collecting information and preparing summary reports on other architecture education programs here and abroad, on global trends in the profession, as well as on trends, opportunities and threats from the world at large. The committee also solicited and received two-page “White Papers” from many faculty about any issues they felt were relevant to preparing a strategic direction. A written poll was conducted of all current students about how and why they chose CMU, as well as expectations for their education and their future careers. A questionnaire was also sent to alumni to determine how their expectations have been met over the years with regard to their education. The committee had the chance to conduct informal discussions with other faculty and brought issues to the table not included in the other research.

In spring 2010 the drafting committee hosted three all-faculty retreats on the subjects of “Proposed Tenets of Architecture”, “Curriculum” and “Pedagogy”. The first discussed six idealized images of the work of the architect in contrasting pairs and sought input from the faculty about the present state of the first professional degree and where we wanted to be (see chart above). A discussion on the curriculum focused primarily on the weaknesses of the existing work. The pedagogy discussion sought input on how to deliver the material most effectively. The intent throughout was to focus attention on long-range plans and all-school ideals, rather than more specific and individualized agendas and program changes. The Head also engaged the Student Advisory Committee (SAC) in this feedback and review process and has scheduled Town Meetings, so that all students, not just their elected representatives, have the opportunity
to comment on the Plan.

The strategic plan has guided our planning processes since then. It recommended the hiring of several new tenure-track faculty, in part as “succession” for professors that would be retiring imminently, and in part to strengthen the studio design program and related areas. It also encouraged us to implement a revised 3+2 curriculum, to replace the 10-semester required sequence that had been in place for decades. The plan also recommended the development of an M.Arch, and led to this report.

A similar long-range strategic planning process will likely be conducted before the next NAAB review in 2018.

I.1.6.A Program Self-Assessment:

The APR must include the following:

A description of the program's self-assessment process, specifically with regard to ongoing evaluation of the program’s mission and multi-year planning objectives.

A description of the manner in which results from program self-assessment activities are used to inform long-range planning, curriculum development, learning culture, and responses to external pressures or challenges to the institution.

At a minimum, program self-assessment procedures shall include, but are not limited to:

Solicitation of faculty, students’, and graduates’ views on the teaching, learning and achievement opportunities provided by the curriculum.

Individual course evaluations.

Review and assessment of the focus and pedagogy of the program.

Institutional and program-level self-assessment, as determined by the institution.

The SoA is constantly self-assessing and evaluating the performance of its faculty, staff and students, its long-range strategic direction and progress in relation to previously set goals, as well as to the external environment around it in the College, at the University, in the profession and in the world at large. Long term strategic planning and visioning grows out of this ongoing self-assessment process.

CMU is a very “bottom up” institution. Heads of schools are given a great deal of authority to decide on program details, and a great deal of control over the finances of their unit. As a result, there are few “top-down” directives or imperatives, and few top-down assessments. The University as a whole is assessed and accredited through a voluntary, peer-review self-assessment process coordinated by the Middle States Commission on Higher Education (MSCHE). At its session on 21 November 2013, MSCHE accepted the Periodic Review Report, reaffirmed the accreditation and commended Carnegie Mellon for the quality of the process and the report. See the section “II.2.1. Institutional Accreditation” below.

CMU’s Presidential Advisory Board process is a standard self-assessment tool used by the CMU President and Provost to evaluate all units on campus. The Presidential Advisory Board visited the SoA in February 2014 and issued a report dated December 2014. Previous PAB advisor boards occurred in 2001 and 2007. The 2014 report summarized the assessment process and succinctly stated the major strengths, challenges and long-range recommendations that the SoA has used to help guide long term hiring goals and curricular development. Among other things, the 2014 report advised the SoA to create an M.Arch program. The school provided a written response in coordination with the Provost’s office in May 2015.

CMU has long used a Faculty Course Evaluation (FCE) system for students to evaluate the quality of courses and instructors. FCE’s are used to improve the quality of teaching and learning at Carnegie Mellon through feedback to individual faculty member, promotion committees and the Head for adjunct hiring. Responses to the FCE provide information on students’ perceptions of their engagement, learning outcomes, the instructor’s behavior and course activities. This feedback helps guide changes in future iterations of the course and/or the instructor's teaching.
The NAAB accreditation process forms another layer of institutional assessment, and invariably includes a great deal of self-assessment. The last B.Arch NAAB accreditation process took place in 2012. It noted strengths, as well as weaknesses. These weaknesses are re-investigated every year, and the APR reports document efforts towards remediating deficiencies or weaknesses.

These more formal self-assessment efforts overlap with ongoing discussions about the performance of the school and our students. The studio coordinators meet several times each semester to discuss the status and direction of the studio sequence. At the end of every academic year they host an all-faculty discussion of the studio sequence, with examples of student work displayed, to gather feedback on each studio year and to discuss how closely the student work fits with the faculty’s expectations.

Every spring, as part of its awards program, the SoA requests that the best students in the class create individual exhibits on four years of their work. Faculty as well as outside professionals from the local AIA are invited to assess and rank the student work exhibits. Voting and discussion leads to the awarding of prestigious travel grants for the students, but also to a rigorous discussion on the state of the student work and by implication the teaching and learning that is taking place with respect to the SoA’s goals, but also the profession’s needs.

In addition to these SoA and faculty assessment tools, the Student Advisory Committee (SAC), which consists of three undergraduate representatives from each graduating class, and the “Graduate Student Council”, with representatives from each program, meets monthly with the Head and staff to discuss issues of concern to the students, including feedback on instructors, courses, facilities and other academic and non-academic opportunities. Their assessment is used to help shape the policy and programs of the school.
I.1.6.B Curricular Assessment and Development

A chart identifying all the parties in the curricular assessment process, their membership (if necessary), and the roles and responsibilities of each.

The SoA relies on the following formal mechanisms for assessment:

- Comprehensive School-wide review in May
- Graduate Student Advisory Council & Undergrad Student Advisory Council
- FCE’s
  - Alumni Critics
  - Visiting Critics
  - Employer visits
- Presidential Advisory Board

A description, if applicable, of institutional requirements for self-assessment.

The SoA, along with all academic units at CMU, is currently engaged in preparation for the upcoming 2018 Middle States Accreditation Self-Study. Curricula and required courses for each academic program offered by the SoA are documented and reviewed for specific, measurable, and learner-centered learning outcomes.
APR – Section 2 – Progress Since the Previous Visit (Not Applicable)
APR – Section 3 – Compliance with the Conditions for Accreditation

I.2.1 Human Resources & Human Resource Development:

The APR must include the following

A resume, using the required template, for each full-time member of the instructional faculty who teaches in the professional degree program.

Faculty Resumes: https://cmu.box.com/s/xw0ya9snoieqw7trlry2stya6hwdy4k8d

A matrix for each of the two academic years prior to the preparation of the APR, that identifies each faculty member, including adjuncts, the courses he/she was assigned during that time and the specific credentials, experience, and research that supports these assignments. In the case of adjuncts or visiting professors, only those individuals who taught in the two academic years prior to the visit must be identified. (The required template is available on the NAAB website). Also, the matrix must be updated for the current academic year showing the semester during which the visit takes place. This supplemental matrix should be available to the team 30 days in advance of the visit and also placed in the team room.

Faculty Experience Matrix for the Last Two Years in B.Arch and Post-Professional Grad Programs: https://cmu.box.com/s/syl9opeooyql6ktuvmh9tv7pee7ly

A description of the manner in which faculty members remain current in their knowledge of the changing demands of the discipline, practice and licensure.

Faculty members are encouraged to present their work in global conference venues, to attend local and regional continuing education workshops, to participate in juries at benchmark institutions and to pursue research and/or endowment funding to support their creative activities. Funding is available from their GM accounts (below), the Gruger Faculty Discretionary Fund, The LiCeaga Fund, the Ferguson-Jacobs Prize and the the College Frontiers of Research Fund. At the university level, the Berkman and the Wimmer Funds are available for full time faculty.

A description of the resources (including financial) available to faculty and the extent to which faculty teaching in the program are able to take advantage of these resources.

On an annual basis, an allocation is put into each faculty member’s GM account based on the number of units they and teach and their rank. These funds can be used for teaching expenses, travel, conference registration and/or equipment. The process does not involve applying to the Head. Receipts for the expenses are submitted to the Business Manager and then reimbursed.

A list of past and projected faculty research (funded or otherwise), scholarship, creative activities by full-time instructional faculty since the previous visit.

Faculty Funded Research | 2015 - 2017:

- **2015 Research Total:** $2,121,478
- **2016 Research Total:** $1,372,670
- **2017 Research Total to Date:** $913,383
- **2015-17 Research Grand Total to Date:** $4,407,531

Faculty Funded Research Matrix in Box (https://cmu.box.com/s/rqic12xcfzdsjhfa1b60g6i41s7x7dy)

A description of student support services, including academic and personal advising, career guidance, and internship placement where applicable.

A number of student support services are available to SoA students; students receive academic and personal advising in the School from a full-time staff academic advisor, a special faculty academic
advisor, and assigned mentors through both the Faculty Mentor and Peer Mentor programs. Additional academic resources are available through Academic Development, the Carnegie Mellon Advising Resource Center, the Intercultural Communication Center, and the Global Communication Center. Personal advising is also available from the Office of International Education through assigned Foreign Scholar Advisors for international students. Personal support resources including Counseling and Psychological Services and University Health Services are also available to students.

Professional, career, and internship advising are available through a full-time CFA Career Consultant in the Career and Professional Development Center who provides individualized support at all phases in students’ academic career and coordinates annual employer visits for internships and post-graduation jobs. Within the School, students are supported by a full-time staff Architect Licensing Advisor, School organized alumni and firm visits and portfolio reviews, and an internal communication campaign, “Opportunity Knocks,” that curates and promotes internship and job opportunities for SoA students.

The name of the Architect Licensing Advisor (formerly the IDP Coordinator) and a summary of his/her recent activities, including professional development, in support of his/her responsibilities.

Alexis McCune Secosky is the Architect Licensing Advisor (ALA) and is currently registered as such on the NCARG website. She keeps current by attending national and regional workshops and conferences.

I.2.2 Physical Resources:

For programs whose pedagogy requires physical resources, the APR must include the following:

A general description, together with labeled 8-1/2” x 11” plans or images of the physical resources assigned to the program, including all spaces used for teaching/learning, scholarship, and public interaction.

The School of Architecture occupies two wonderful turn-of-the-century buildings on the central part of campus. With over 50,000 square feet of space in these two buildings, (Margaret Morrison Carnegie Hall and the College of Fine Arts), the School is able to provide dedicated studio space for every full-time student.

As the foundation to the pedagogy of the first professional degree programs, the studios are of ultimate importance. CFA 200 has been the traditional “main” studio for the School of Architecture and currently houses all third, fourth and fifth-year students. MMCH 312 is the home of all first and second-year students and the fourth floor is home to all graduate students.

Specialized Facilities:

Digital Fabrication Lab (dFAB) (MMCH C)

Because architecture is fundamentally physical, dFAB offers students and faculty advanced digitally-driven design, prototyping and manufacturing equipment to span the divide between virtual simulation and physical design investigation. Students and faculty from the Schools of Architecture, Art and Design use the lab—open 40 hours per week—throughout the design process and at multiple scales.

The lab is located in the basement of Margaret Morrison Carnegie Hall (MMCH) and comprises 4000 square feet, including 1000 square feet of dedicated robotic fabrication space.

Robot lab equipment

ABB IRB 4400 7-axis industrial robotic cell, including external rotary axis table (45kg payload rating)

ABB IRB 6640 8-axis industrial robotic cell, including 6-meter linear rail axis and tool axis (180kg payload rating)

Automated tooling:
tool change milling spindle
pneumatic gripper
sensor probe
hot wire cutter
incremental metal former

Other equipment:
4-axis CNC router (48” x 96” x 11” cutting volume), includes oscillating tangential knife
24” x 36” 75W laser cutters (2)
vacuum forming machine (22” x 22” x 16” forming volume)
60” x 96” vacuum laminator
fused deposition soluble support 3D printer
plaster powder color 3D printer

Computational Design (CoDe) Lab (MMCH 403)
CoDe Lab is a proto-makerspace with a curriculum based on post-disciplinary education. The space is designed to facilitate collaboration between architects, computer scientists, artists and engineers at the frontier of design and technology. The lab is currently under new directorship and assessing next steps in curriculum design as well as actively seeking to update internal computational, fabrication and prototyping resources. The facility is home to Master students in the Tangible Interaction Design (MTID) and Computational Design programs but is open to interested students at all levels, from any background.
The lab is divided into two, 300 SF spaces: a classroom, and fabrication/office space for 5-10 MTID students.

Equipment:
Epilog 24” x 18” laser cutter (beyond service warranty)
Dimension SST FDM 3D printer (beyond service warranty)
component storage, electronics workbench with soldering stations
drill press, bandsaw, various power & hand tools

Robert L. Preger Intelligent Workplace (IW) (MMCH 415)
This living and lived-in office/laboratory provides hands-on experience with the performance of advanced integrated building technologies including acoustics, lighting and materials. It also affords interaction with leading researchers and professionals in architecture, engineering, manufacturing, government and the non-profit sector who visit to participate in research and demonstration projects. Research undertaken in the IW aims to improve organizational flexibility; technological adaptability; energy and environmental effectiveness; and the health, productivity and motivation of white-collar workers. The IW is home to the Center for Building Performance and Diagnostics but is open to all interested students.
At 6700 square feet, the IW sits atop Margaret Morrison Carnegie Hall.

Selected components:
radiant heating and cooling
energy recovery ventilation

modular components (eg, structure, façade, access floor tiles, power, voice and data, interior systems)

windows that maximize daylight, ventilation and heat rejection

environmental control and feedback via iOS apps

extensive insulation, including stress-skinned insulated metal panels

design for disassembly

The Shop (CFA A)

The woodshop provides a setting for each member of the School of Architecture to explore the process of designing and creating handmade objects. In long-standing tradition, every first-semester student receives training in the shop and continues to develop classic wood- and metalworking skills until graduation.

The shop is nearly 3,800 square feet in size with a large machine and assembly room, tool and material storage areas, a project storage area, offices and a library and an adjacent pin-up area for design review.

Equipment:

- surfacer
- joiners (2)
- table saws (2)
- radial arm saw
- wood band saws (2)
- metal band saw
- metal and wood lathes
- milling machine
- table-top router
- drill presses (4)
- vertical and horizontal belt sanders
- disc sanders (2)
- jig saws (2)
- a range of other power and hand tools

Remaking Cities Institute (RCI)

An urban design research center based in the School of Architecture, the RCI aims to promote an improved quality of life in cities and towns through academic, applied and action research into place-making and community redevelopment. The RCI expands the regional and global impact of the School of Architecture’s Urban Laboratory studio and Master of Urban Design (MUD) program by fostering multi-sector collaboration between faculty, researchers, professionals and community organizations. With the AIA, the RCI recently co-hosted the Remaking Cities Congress, a working meeting of 300 urban-design delegates from around the world.
A description of any changes to the physical resources either under construction or proposed.

We are currently reviewing plans to relocate all third, fourth and fifth-year studios to MMCH 312 and first and second-year studios to CFA 200. This move would allow for the newly created studio-based master’s programs (MArch, MAAD, MUD) to reside in the same space as the upper-level undergraduate studios.

In addition to the relocation of upper-level studios we are pursuing funding to remove an original corridor wall adjacent to MMCH 312. This wall currently impedes daytime light and air circulation within the studio and its removal would allow for precious usable floor space for the addition of the MArch and MAAD studios.
STONE CUTTING SHOP
- stone cutting training
- custom cut stone components

PREFABRICATION AREA
- value added product and housing assembly

METAL SHOP
- metal work training
- custom hardware production
- CNC plasma cutter training

WOODSHOP
- carpentry training
- community workshops + demonstrations
- prototyping of value-added products
- tool usage and safety procedures
- used building material processing training

COMMUNITY ROOM
- community workshops + demonstrations
- meetings + presentations + public events
- sustainability + business development classes

DIGITAL FAB LAB
- production for value added products
- introduction to digital design tools
- CNC router training

TOOL STORAGE + SPRAY BOOTH
- lockable storage for tools
- ventilated room for protecting finish work

STUDIO
- design workspace
- project coordination + collaboration
- pin-up space + drawing storage

GALLERY
- display of community workshop projects
- showcase value added products
- advertise Project RE_ mission + goals

Project RE_ plan
Identification of any significant problem that impacts the operation or services, with a brief explanation of plans by the program or institution to address it.

The unique structure and culture of Carnegie Mellon is built upon the notion that the School of Architecture is a part of the College of Fine Arts and not a separate school with departments onto itself, as might be seen at other universities. The SoA lacks a “front door” by being split in two buildings on upper or deep basement floors. It is not feasible in the near future to consolidate the architecture spaces into one building with a direct ground floor entrance. The Margaret Morrison Extension (MMX) is the ideal future for the school. The dean has re-started the MMX visioning process under the SoA head's direction. The MMX is in the queue of university capital projects, but will remain visionary until adequate funding is acquired. This proposed 125,000 gsf facility, represents a monumental opportunity to address space issues for each of the schools and units. More importantly though, it is the 21st century embodiment of Hornbostel's original vision of co-locating five artistic disciplines together in one building to support interdisciplinarity. Combining the existing Margaret Morrison Carnegie Hall spaces with the MMX means that all five schools and the Frank-Ratchye STUDIO for Creative Inquiry can be located in one building – the “CFA” building of the 21st century.

Until such time that the grand vision is realized, the Dean and the Head are working with advancement to raise at least $1M to improve the educational experience for our students through specific improvements to the facilities. This will include new workstations for each student that includes computer, dual monitors, drawing/modeling space, power, storage and ergonomic seating and lighting. In addition, all review spaces will be upgraded with better (or new) projection and flexible, adaptable, lighted pin-up solutions.

A description of how the program provides space for faculty to fulfill all four of their roles: teaching, scholarship, service, and advising.

All tenured and tenure-track faculty have individual office space while teaching, special, research and adjunct faculty are provided shared office spaces.

Adjacent to the studios are lecture and seminar spaces that accommodate both didactic and interactive learning; analog and digital workshops for making and research laboratories.

The faculty and staff all have access to the specialized facilities in the SoA - Shop, dFAB, CoDe, RCI & Project Re_ by appointment with the respective directors of those facilities.

Programs that leverage international programs, or off-campus settings such as urban centers, to teach courses where student performance criteria are being met, must provide a description of these venues in the APR and how they affect a program’s on-campus physical resources.

Our internationally recognized Urban Design Build Studio (UDBS) is co-located within CFA 211 and Project Re_ at Construction Junction, approximately 3 miles from the center of main campus. This 14,900 sf space has been converted from a warehouse to a custom fabricated community room, studio and gallery space, metal, stone cutting and wood shops and digital fabrication lab.

We have collaborative arrangements with La Salle University School of Architecture in Barcelona, ES and Politecnico di Torino (PdT) in Torino, IT. We are hosting three masters students from PdT through the European Erasmus program and anticipate two faculty (Torello and Byrne) to be in residence at PdT in Summer 2017.

I.2.3  Financial Resources

The APR must include the following: A description of the institutional process for allocating financial resources to the professional degree program.

Funding for the SoA comes predominantly from an annual allocation from the Provost to the College of Fine Arts, and then to each of the units within the college. Graduate tuition income flows directly to the unit that houses the degree program after a share of roughly $9000 is withheld for central administrative services and expenses. Gifts from institutions and individual donors, as well as endowment income and
sponsored projects round out the revenue streams.

A description of the expense categories over which the program has either control or influence.

All faculty and staff salaries and operating expenses, as well as graduate student tuition, are initiated at the School level and approved by the Dean. The School has no discretion over the offers of financial aid to our undergraduate students.

### USES OF FUNDS: FY16

<table>
<thead>
<tr>
<th>Expense Category</th>
<th>FY16 Amount</th>
<th>FY16 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT Faculty Salaries</td>
<td>$2,281,000</td>
<td>38%</td>
</tr>
<tr>
<td>Grad Expenses</td>
<td>$1,042,000</td>
<td>17%</td>
</tr>
<tr>
<td>Staff Salaries</td>
<td>$765,000</td>
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</tr>
<tr>
<td>Adjunct Salaries</td>
<td>$443,000</td>
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</tr>
<tr>
<td>Other</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,078,000</strong></td>
<td></td>
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</table>

### USES OF FUNDS: FY17

<table>
<thead>
<tr>
<th>Expense Category</th>
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<th>FY17 Percentage</th>
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<tbody>
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<tr>
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<tr>
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<tr>
<td>Adjunct Salaries</td>
<td>$531,000</td>
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</tr>
<tr>
<td>Other</td>
<td>$1,246,000</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,160,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note: Masters Tuition Sharing amount described below (estimated at $90,000) is not included

A description of the revenue categories over which the program has control or influence.

The Head works with CFA and University Advancement to cultivate gifts from foundations, corporations and individuals to provide additional revenue for the School, which may be unrestricted in purpose, or restricted to support specific activities through expendable or endowed funds. The School also manages a number of existing endowed funds supporting faculty salaries, scholarships and fellowships, and other activities such as a lecture series, and student prizes and travel awards.

### SOURCES OF FUNDS: FY16

<table>
<thead>
<tr>
<th>Source</th>
<th>FY16 Amount</th>
<th>FY16 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation</td>
<td>$3,582,000</td>
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</tr>
<tr>
<td>Grad Income</td>
<td>$2,440,000</td>
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</tr>
<tr>
<td>Other</td>
<td>$56,000</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,078,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

### SOURCES OF FUNDS: FY17

<table>
<thead>
<tr>
<th>Source</th>
<th>FY17 Amount</th>
<th>FY17 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation</td>
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<tr>
<td>Grad Income</td>
<td>$2,316,000</td>
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<tr>
<td>Other</td>
<td>$41,000</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,160,000</strong></td>
<td></td>
</tr>
</tbody>
</table>
A description of the scholarship, fellowship and grant funds available for student and faculty use.

The SoA currently offers all masters students annual scholarships of $6,000 to $25,000, entered as 50% in both the Fall and Spring semesters. These scholarships are contingent upon timely payment of tuition and successful completion of previous semester as a full time student. In addition, a limited number of Graduate Assistantships are available to full time master’s students in the Fall semester, with a possibility of continuing in the spring. This assistantship entails working as an employee of the University for approximately four (6) hours per week at a rate of $15 per hour for up to 135 hours (up to $2,000), based upon full time enrollment. There are also opportunities for fellowships in the final year to teach in the undergraduate program, as well as existing faculty research projects that may offer assistantships and other funding opportunities.

A brief summary of the following (limited to 1 page; may be a bulleted list):

Pending reductions or increases in enrollment and plans for addressing these changes.

In reviewing a program’s physical resources, the NAAB is not offering an opinion as to whether, or certifying that, the institution’s facilities comply with all applicable fire, safety, building, and health codes and regulations.

Pending reductions or increases in funding and plans for addressing these changes.

Changes in funding models for faculty compensation, instruction, overhead, or facilities since the last visit and plans for addressing these changes (include tables if appropriate).

Planned or in-progress institutional development campaigns that include designations for the program (e.g., capital projects or endowments).

The SoA is fully aware of the financial implications of launching a new master’s program, but fortunately has an excellent track record of doing this from three master programs (MSBPD, MSCD & MSAECM) in the 90’s to seven today with the addition of MSSD, MTID, MAAD & MUD. The financial model at CMU encourages units to expand their financial resources through strategic development of graduate programs as the tuition rebate system is completely different between undergraduate programs and graduate programs.

The Provost’s allocation was originally intended to fund the direct and indirect costs of the undergraduate program, as well as any graduate program offerings. In 2006, the university encouraged the individual departments and schools to build their graduate programs by returning to the programs 75%-80% of graduate student tuition dollars. In 2016, the university adjusted their stance and agreed to let the Deans of the 6 colleges reallocate Masters Tuition Sharing (MTS) to the various colleges, based on the number of units a college taught to a student from another college. This new model works directly against SoA graduate student income when we are offering a broader, general education as part of the M. Arch curriculum. This will necessitate the SoA developing specialized, in-house versions of external (other College) courses that are specialized for the various degree requirements. Until that time, the additional cost to the SoA is approximately $90,000 per year.

Another challenge is that, with this increase in enrollment and offerings, the SoA needs to increase the number of full time faculty. See “Human Resources, I.2.1” above for more information. That funding comes from the annual allocation and graduate program income, as well as special allocations as noted below.

The SoA anticipates undergraduate enrollment to remain flat while the master’s programs will see incremental growth into the future.

As an institution we have an obligation to weigh the costs and borrowing that students undertake to afford their whole education, undergrad and grad. Even though many caution against straight “return on investment” (ROI) calculations for higher education, the ROI for a five-year B.Arch degree at a private
institution like CMU is a growing concern. In general, the 5-year B.Arch is the quickest way to finish architecture school towards licensure, but not always the cheapest. With careful planning, the proposed M.Arch has the potential to reduce the cost for a student to attain a first professional architecture degree.

Costs and CMU tuition for the M.Arch will be similar to other SoA "professional" (terminal-degree) master’s programs. Track 3 students will require 6 semesters of tuition; Track 2 will require 4 semesters of tuition. The annual tuition will be $37,690 for graduate students entering in Fall 2018. In addition to tuition, CMU estimates additional costs of approximately $22,400 or greater for compulsory fees, living expenses, and health insurance. Current information is available at the HUB.

To enroll the best students that receive admission offers, the SoA is committed to offering significantly larger scholarships than the other master programs and is also committed to raising funds for merit-based support.

**Significant Gifts and Funding:** The SoA has also received a number of significant gifts in support of our school. The advancement staff within the College of Fine Arts and the University assist the department head, individual faculty and students with identifying and securing funding. The Assistant Dean for Research in the college supports faculty and students in preparing and submitting proposals for research. These college staff have been tasked with assisting our incoming M.Arch students in the same way.

The SoA received the following gifts, grants and/or major research funding for equipment, facilities, centers and other projects:

- **A $2 million gift was received from the Heinz Endowments. This is the most significant gift the SoA has ever received.**
- **A $1.5 million was dedicated to a named endowment: The David Lewis Directorship of the Remaking Cities Institute. A total of $500,000 was dedicated to funding 3 years of the UDream - (Urban Design Regional Employment Action for Minorities) program and continues to fund the program into its 8th year.**
- **The SoA received a $750,000 endowed gift from the P.J.Dick Corporation to support fellowships in the AECM programs.**
- **A grant of $250,000 was received from the Enkeboll Foundation for the Arts and Architecture in support of Integrated Design and Practice as well as the purchase of a 6-axis robotic milling system with rotating materials table, controlling hardware and software ($134,000) and the funding of student projects.**
- **A special $491,000 allocation was received from the Provost to fund the renovation of the Margaret Morrison Carnegie Hall (MMCH) C Basement for the creation of a Digital Fabrication Lab in conjunction with the hire of tenure track faculty member Jeremy Ficca.**
- **An additional special allocation of $215,000 was received from the Provost to fund additional renovations of the Margaret Morrison Carnegie Hall (MMCH) C Basement as well as the addition of an 8-axis ABB IRB 6640 robot on 7 meter track to support the research and teaching of tenure track faculty member, Josh Bard.**
- **A special allocation of over $300,000 was received from the Provost over a 3 year period to fund Assistant Professor Erica Cochran to work full time at the Navy Yard in Philadelphia to oversee the SoA’s $3.6M of the DOE funded Consortium for Building Energy Innovation (CBEI) project, then an additional $69,000 as a University contribution to her Full Time salary as a Tenure Track faculty member over 3 years (2017-2019).**
I.2.4  Information Resources:

The APR must include the following:

A description of the institutional context for library and information resources.
A description of the library and information resource collections, services, staff, facilities, and equipment that includes the following:
A brief description of the content, extent, and formats represented in the current collection including subject areas represented.
A brief description of any significant problem that affects the operation or services of the libraries, visual resources collections, and other information resource facilities that support the accredited program and plans for addressing them.

The Carnegie Mellon University Libraries supports teaching, learning, and research activities of all faculty and students at the university. The Libraries strives to meet the university’s contemporary needs and aspirations with an increasing emphasis on support for researchers and graduate programs. CMU’s information resources are competitive in an environment that encourages resource sharing and plays to the University’s technological strengths. The Libraries support all SoA curriculums and programs including the five-year undergraduate first-professional degree program as well as graduate Masters and PhD programs. The Libraries is well positioned to support a new Master of Architecture degree program.

The position of Architecture Librarian and Archivist is divided between liaison responsibilities for the SoA and responsibility for the CMU Architecture Archives. The Architecture Librarian and Archivist reports to the Associate Dean of University Libraries, who leads the Research and Academic Services division. The Dean of University Libraries reports directly to the University Provost. Librarians and Archivists have faculty status at CMU under the Policy on Librarian and Archivist Appointments. Library faculty must meet criteria for reappointment and promotion, and are required to pursue scholarship and creative activity and professional service. The current Architecture Librarian and Archivist, Martin Aurand, is appointed at the Principal Librarian level, the highest faculty rank. The Architecture Librarian and Archivist has no formal faculty status within the SoA, but is welcomed as a faculty colleague within the SoA. The current Architecture Librarian and Archivist holds a Master of Library Science (M.L.S.) degree and an M.A. in American Studies and Historic Preservation, and is a member of the Association of Architecture School Librarians (AASL) and the Art Librarians Society of North America (ARLIS/NA).

The Architecture Librarian and Archivist is responsible for:

Reference and consultation services provided via office appointments, regularly scheduled “office hours” in the SoA, email, or phone

Instruction, teaching, and classroom support activities including library orientation and information literacy sessions, teaching and learning sessions with archives and special collections, topical lectures, course-specific Web pages, and book carrels in studios

Collection development and management in various media including books and e-books, periodicals and e-journals, and electronic resources such as databases and other Web-based products

Communications regarding issues in scholarly communications including data management, open access, and advocacy for the university’s institutional repository for scholarly output

Outreach to SoA faculty, staff, and students through promotion of library resources and services, participation in school culture and project reviews, and so forth.

When not present in the SoA, the Architecture Librarian and Archivist is based in the Arts Library, which occupies the fourth floor of Hunt Library, a central arts, humanities, social sciences, and business library within short walking distance of SoA facilities. The Engineering and Science Library in Wean Hall is also a short walking distance from SoA facilities. The Arts Library supports teaching, learning, and research activities of faculty and students in CMU’s CFA, including the schools of Architecture, Art, Design, Drama, and Music. The Arts Library also serves architecture and other arts constituencies across the university and within the larger community.
A curriculum-based program of library instruction supports the educational objectives of the SoA. First-year architecture students participate in the University’s C@CM (Computing at Carnegie Mellon) program, which provides instruction in computer skills, research skills, and information ethics. Instruction sessions tied to specific courses and assignments in the SoA orient students to the Libraries, instruct them in the uses of information resources and technology, and introduce them to research topics and methods. The Architecture Librarian and Archivist and teaching faculty are jointly responsible for this instruction throughout the curriculum. Presently, library instruction occurs most explicitly in the first-year studio and seminar, and in upper-level classes that require research papers, and in thesis preparatory courses. Incoming graduate students are introduced to the research environment at CMU. Library instruction encompasses sessions that promote teaching and learning with rare books and architectural drawings.

The Libraries provides ever-expanding access to electronic information resources that are increasingly available without regard to place. At the same time, the Libraries continues to grow its print collections, and maintains a commitment to providing information resources in whatever media are necessary and appropriate. For architecture and the arts in particular, active collecting in a variety of media will continue for the foreseeable future.

CMU Libraries’ book collections surpass one million volumes. Though subject-based collection figures are difficult to compute in a central library, collections include approximately 50,000 volumes in NA and other classes related to architecture, landscape architecture, construction, and urbanism. The collection includes an increasing number of e-books, especially reference works and titles in technical fields. Books and ebooks are classified using the Library of Congress Classification system. The Libraries offers interlibrary loan and document delivery services, greatly expanding the scope of available resources on an as-needed basis. CMU affiliates have borrowing privileges at the University of Pittsburgh and the Carnegie Library of Pittsburgh.

The Libraries currently subscribes to approximately 80 active architecture-related journals and e-journals. The Libraries maintains extensive back-runs of numerous additional titles, subscribes to hundreds of titles in related fields, and provides access to thousands of additional titles via aggregated databases and other online collections. “A Core List of Periodical Titles for a First Professional Degree in Architecture,” developed by the Association of Architecture School Librarians (AASL), has long been used to shape this collection. The Libraries also provides access to dozens of web-based databases that are of use for architectural research including the Avery Index to Architectural Periodicals, Art Source, Design and Applied Arts Index, JSTOR, and Compendex. Subscriptions to more specialized electronic products include CumInCad, BuildingGreen Suite, and ULI Development Case Studies. Increasingly, such resources provide online access to full-text articles and other documents.

The Arts Resources Specialist manages the Visual Resources Collection. The Image Collection, a collection of high-quality digital images selected by and for CMU users, is powered by Luna Imaging software. The Arts Library also subscribes to a number of visual image databases including ARTstor. Architecture-related videos are available in the Video Collection.

The Carnegie Mellon University Architecture Archives is a special collection of architectural drawings and other records documenting the architects and architecture of Pittsburgh and its region. The Archives serves as a resource for the SoA, the University, and the community at large. It encourages class visits and student projects, and sponsors and participates in exhibits, publications, and special projects like the HACLab Pittsburgh: Imagining the Modern innovative exhibition at the Carnegie Museum of Art; and Pittsburgh Projects, a digital architectural guidebook and mobile application.

Funding for library operations takes place within a centralized University Libraries context. CMU has increased funding for library materials by up to 6% annually for the last twenty years. This sustained record of funding increases demonstrates institutional commitment and has had a significant impact on
the library and its users. The Architecture Librarian and Archivist is responsible for expending funds allocated for architectural resources, which surpass $60,000 annually. Though subject to a number of special circumstances that may affect annual totals, this spending level is sustainable. The Caste Architecture Resources Endowment Fund, valued at approximately $39,000, provides additional funding for library materials. The relevant staff makes expenditures for visual resources and videos with input from the Architecture Librarian and Archivist. Endowment funds dedicated to the Architecture Archives are valued at approximately $174,000. Substantial funding expended for other library collections also benefits the SoA as architectural education becomes increasingly interdisciplinary.

I.2.5 Administrative Structure & Governance:

The APR must include the following:

A description of the administrative structure for the program, the academic unit within which it is located, and the institution.

The University consists of seven colleges and schools: the College of Fine Arts (which includes the School of Architecture), the Carnegie Institute of Technology (engineering), the Dietrich College of Humanities and Social Sciences, the Mellon College of Science, the Tepper School of Business, the School of Computer Science, and the H. John Heinz III College (Public Policy & Information Systems).

The CFA includes the five schools - Architecture, Art, Design, Drama & Music - and the Frank-Ratcheye Studio for Creative Inquiry,

A description of the opportunities for involvement in governance by faculty, staff, and students in the accredited program, including curriculum development.

At the university level there is the Faculty Senate, the Staff Council and Student Senate.

At the College level there is the College Council (faculty), for staff there is the newly formed Staff Council and for students the College Student Advisory Council.

In the SoA there are the STEM- and Studio- based committees (faculty and staff) and the Graduate Student Advisory Council and the undergraduate Student Advisory Council

A chart or graphic that illustrates the description.

University Organization Chart:

```
Carnegie Mellon University

President of the University
Subra Suresh, PhD

Provost
Fanam Jahanian

Interim Executive Vice President
John Lehoczky

Dean, College of Fine Arts (CFA)
Dan J. Martin

Head, Architecture
Stephen R. Lee

Head, Art
Charlie White

Director, F-R SHCI
Golan Levi

Guardian
Terry Irwin

Head, Design
Denis Colwell

Head, Drama
Peter Cooke
```
The Academic Structure for the SoA:

**School of Architecture – Academics**

**Head, School of Architecture**
Stephen R. Lee

**Associate Head, School of Architecture**
Mary-Lou Arscott

**STEM-based Program Committee**
CO-DIRECTORS:
Ramesh Krishnamurti
Daniel Cardoso

TRACK CHAIRS:

APD:
Vivian Loffness (MS/PhD)

MS/ID:
Diana Cupkova

MTD:
Eddy Man Kim

CD:
Daniel Cardoso (MS)
Ramesh Krishnamurti (PhD)

AECA:
Erica Cochran (MS)
Omer Alon (PhD)

Mtgs: 3rd Tuesday of the month at noon

**Studio-based Program Committee**
CO-DIRECTORS:
Kai Gutsche
Jeremy Ficca

TRACK CHAIRS:

MUP:
Dor Carter, Co-Chair
Stefan Glubek, Co-Chair

MAAD:
Jeremy Ficca

MTD:
Eddy Man Kim

M.Arch:
Kai Gutsche

B.Arch:
Mary-Lou Arscott

Mtgs: 3rd Thursday of the month at noon

The Staff Structure for the SoA:

**School of Architecture – Support Staff**

**Head, School of Architecture**
Stephen R. Lee

**Computing, Admin.**
Bob Armitage

**Print Service/IT Assoc.**
Brian Staley

**Assistant Director**
Jon Holmes

**Facilities & Special Projects Manager**
Kristen Franches

**Assistant Head Business Manager**
David Kulas

**Financial Assistant**
Diane Martin

**Digital Fabrication**
Lab Director
Jeremy Ficca

**Lab Manager**
Terry Hitz

**Marketing & Communications Manager**
Meredith Marat
Part Two (II): Educational Outcomes And Curriculum

II.1.1 Student Performance Criteria:

**Bachelor of Architecture Student Performance Criteria (SPC) Matrix:**

*Full size PDF:* (https://cmu.box.com/s/8d2o5y8lk8t8xcffc3uk51xsd60rvfdi)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Category</th>
<th>Placement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.215</td>
<td>Design Studio I</td>
<td>A.01</td>
<td>A.05</td>
<td></td>
</tr>
<tr>
<td>46.216</td>
<td>Design Studio II</td>
<td>A.02</td>
<td>A.05</td>
<td></td>
</tr>
<tr>
<td>46.217</td>
<td>Design Studio III</td>
<td>A.03</td>
<td>A.05</td>
<td></td>
</tr>
<tr>
<td>46.218</td>
<td>Design Studio IV</td>
<td>A.04</td>
<td>A.05</td>
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<td>46.219</td>
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<tr>
<td>46.220</td>
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<td>A.05</td>
<td></td>
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<tr>
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<td>46.223</td>
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<td>46.224</td>
<td>Design Studio X</td>
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<td>A.05</td>
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*Note:* The table continues with more courses and categories.
## Master of Architecture Student Performance Criteria (SPC) Matrices

### Full size PDF Two Year: [Link](https://cmu.box.com/s/wm0h0crgzhshys72v1z92ngd51ov1y1)

### Full size PDF Three Year: [Link](https://cmu.box.com/s/ql4sksz9h4fe3evxxuxuf8fd6f3s777)

### Master of Architecture Two (2) Year Track [SPC Matrix] 1 September 2017

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<th>Course Code</th>
<th>Course Title</th>
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</thead>
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<tr>
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<td>40-400</td>
<td>M Arch Studio: Integration I</td>
<td>12</td>
</tr>
<tr>
<td>Winter</td>
<td>40-401</td>
<td>M Arch Studio: Integration II</td>
<td>12</td>
</tr>
<tr>
<td>Spring</td>
<td>40-402</td>
<td>M Arch Studio: Integration III</td>
<td>12</td>
</tr>
<tr>
<td>Fall</td>
<td>40-403</td>
<td>M Arch Studio: Integration IV</td>
<td>12</td>
</tr>
<tr>
<td>Winter</td>
<td>40-404</td>
<td>M Arch Studio: Integration V</td>
<td>12</td>
</tr>
<tr>
<td>Spring</td>
<td>40-405</td>
<td>M Arch Studio: Integration VI</td>
<td>12</td>
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</tbody>
</table>

### Master of Architecture Three (3) Year Track [SPC Matrix] 1 September 2017

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tr>
<td>Fall</td>
<td>40-400</td>
<td>M Arch Studio: Integration I</td>
<td>12</td>
</tr>
<tr>
<td>Winter</td>
<td>40-401</td>
<td>M Arch Studio: Integration II</td>
<td>12</td>
</tr>
<tr>
<td>Spring</td>
<td>40-402</td>
<td>M Arch Studio: Integration III</td>
<td>12</td>
</tr>
<tr>
<td>Fall</td>
<td>40-403</td>
<td>M Arch Studio: Integration IV</td>
<td>12</td>
</tr>
<tr>
<td>Winter</td>
<td>40-404</td>
<td>M Arch Studio: Integration V</td>
<td>12</td>
</tr>
<tr>
<td>Spring</td>
<td>40-405</td>
<td>M Arch Studio: Integration VI</td>
<td>12</td>
</tr>
</tbody>
</table>

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Carnegie Mellon University  
Architecture Program Report for Initial Candidacy  
March 2017 – Revised December 2017 | Page 49
A brief description of the pedagogy and methodology used to address Realm C.

Realm C will be accomplished through the sequence of courses that include:

- **Statics & Structures**
- **Materials & Assembly**
- **Enviro 1: Climate and Energy**
- **Enviro 2: Advanced Building Systems Integration**
- **Masters Studio: Integration 2**

A brief description of the methodology for assessing student work (i.e., “high” v. “low” pass).

The SoA considers work receiving an “A” to be “High Pass”, work receiving a “B” or “C” to be “Pass” and work receiving a “D” to be “Low Pass”. The standard rubric in the SoA describes general requirements to attain the grades of A, B, C, D and R as follows:

**A:** Superlative or exemplary work, initiative beyond the description of the problem. Significant understanding of the problem. Conceptual clarity. An attitude of self-motivated exploration, open-mindedness, and a willingness to benefit from criticism.

**B:** Very good, some exemplary work, a thorough understanding of the problem. Project displays conceptual foundation, well crafted. Competence and mastery of skills. Open, inquisitive attitude.

**C:** Satisfactory or adequate work that meets the minimum requirements of the problem and course. Shows understanding of the problem, with some deficiencies. Reasonable mastery of skill and concepts. This grade is seen to represent the average solution.

**D:** Passing, work that is complete, but does not show an understanding of the problem or expectations, and demonstrates deficient skills. Work often attended with belligerent or closed-minded attitude with respect to criticism and self-motivation. Although technically passing, this work is unacceptable in a professional program and can lead to being dropped from the B.Arch program.

**R:** Failing work that does not meet the requirements of the studio, shows a serious deficiency in skills or is incomplete. Raises questions with respect to the future success within the program.

Notes on Student Performance Criteria:

A.3 Investigative Skills: This SPC refers specifically to investigative skills rather than to the broader definition of research or scholarship. The intent is to ensure that students are able to identify, find, select, and use the full range of information resources available to them.

B.3 Codes and Regulations: It is not the intent of this SPC to be a complete checklist of codes that students have mastered. Rather, students must demonstrate the ability to incorporate the fundamentals of multiple codes.

C.1 Research: The purpose of the SPC is for students to demonstrate their understanding of the many methods of research and study that may be used in the course of identifying and selecting solutions to the problems encountered in a complex architectural project.

C.3 Integrative Design. This SPC requires students to demonstrate the integrative thinking and application of technical knowledge and design skills that shape complex design and technical solutions. The student work must demonstrate the ability to resolve the multiple demands of site, program, codes, environmental stewardship, and building systems through a rigorous process of decision making and then to document or represent their choices accurately. Integrative design may be taught in single studios, or over multiple courses (e.g., a design studio coupled with a technical documentation course). Programs are encouraged to explore the best format for achieving this SPC.

Sustainability (see p. 12).
II.2.1 Institutional Accreditation:

The APR must include a copy of the most recent letter from the regional accrediting commission/agency regarding the institution's term of accreditation.

Carnegie Mellon University
Architecture Program Report for Initial Candidacy
March 2017 – Revised December 2017 | Page 51
machi, Chuo-ku, Kobe, 650-0047 Japan; Japan; University of Plymouth, Centre for Robotic and Neural Systems, Drake Circus, Plymouth PL4 8AA, United Kingdom

ACCREDITATION INFORMATION
Status: Member since 1921
Last Reaffirmed: November 21, 2013

Most Recent Commission Action:
January 3, 2017: To acknowledge receipt of the substantive change request. To include the reclassification of the additional locations at (1) Electronic Arts, 250 Shoreline Drive, Redwood, CA 94065; and (2) Los Angeles Center, Carnegie Mellon University, 4640 Lankershim Blvd., Suite 125, North Hollywood, CA 91602 as instructional sites and to include the change within the scope of the institution's accreditation. The next evaluation visit is scheduled for 2017-2018.

Brief History Since Last Comprehensive Evaluation:
November 21, 2013: To accept the Periodic Review Report, to reaffirm accreditation, and to commend the institution for the quality of the Periodic Review process and report. The next evaluation visit is scheduled for 2017-2018.

June 30, 2014: To acknowledge receipt of the substantive change request. To note that the institution has closed its additional location at Asia & Pacific Trade Center, ATC Building ITMSF N-15, 2-1-10, Nanko- kita, Osaka-City, Japan 559-0034. To remove this additional location from the institution's accreditation. The next evaluation visit is scheduled for 2017-2018.

April 27, 2015: To acknowledge receipt of the substantive change request. To include the additional location at the Brooklyn Navy Yard, 25 Washington Avenue, Brooklyn, NY 11205 within the scope of the institution's accreditation. The Commission requires written notification within thirty days of the commencement of operations at this additional location. In the event that operations at the additional location do not commence within one calendar year from the approval of this action, approval will lapse. The next evaluation visit is scheduled for 2017-2018.

April 22, 2016: To note that institution's decision to withdraw the substantive change request for an additional location at the Brooklyn Navy Yard, 25 Washington Avenue, Brooklyn, NY 11205.

Next Self-Study Evaluation: 2017 - 2018

Date Printed: August 22, 2017

DEFINITIONS

Branch Campus - A branch campus is a domestic or international location of an institution that is geographically apart, independent of the primary/main campus. The branch campus is considered independent of the main campus if it is permanent in nature; offers courses in educational programs leading to a degree, certificate, or other recognized educational credential; has its own faculty and administrative or supervisory organization; and has its own budgetary and hiring authority. (34 CFR §602.22)

Additional Location - An additional location is a domestic or international location, other than a branch campus, that is geographically apart from the primary/main campus and at which the institution offers at least 50 percent of the requirements of an educational program. (34 CFR §602.22) ANYA ("Approved but Not Yet Active") indicates that the location is included within the scope of accreditation but has not yet begun to offer courses. This designation is removed after the Commission receives notification that courses have begun at this location. ANYC ("Approved but Not Yet Closed") indicates that the institution has requested that the location be officially closed through the substantive change process. The location is currently included within the scope of accreditation but the institution will be stopping all operations at this location in the near future. The institution should inform the Commission (via email at sc@nscche.org) of the date that operations cease. This designation is removed after the Commission receives
II.2.2 Professional Degrees and Curriculum:

The APR must include the following:

– Title(s) of the degree(s) offered including any prerequisite degree(s) or other preparatory education and the total number of credits earned for the NAAB-accredited degree or track for completing the NAAB-accredited degree.

– A table showing the distribution of general studies, required professional studies, and optional studies.

Bachelor of Architecture:

450 CMU units (150 credit-hrs) including 135 CMU units (45 credit hours) of general studies.

Full size PDF: [https://cmu.box.com/s/drqnmd7h6oa074fcam7q00y2v3ja69k](https://cmu.box.com/s/drqnmd7h6oa074fcam7q00y2v3ja69k)
Master of Architecture (candidacy granted 2017):

Advanced Standing (two-year track): 180 CMU units (60 credit-hrs), Class of 2019: 18 students

Full size PDF: (https://cmu.box.com/s/d3r9v35is6sdo9nft7333ztbfknjlj1q9)

M.Arch 2-Year Distribution

Maximum Established by Admission Review Game Plan

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Minimum Established by Admission Review Game Plan

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Master of Architecture (candidacy granted 2017):

Conventional Standing (three-year track): 180 CMU units (60 credit-hrs) NB. the first three-year class will be recruited after obtaining accreditation.

Full size PDF: [https://cmu.box.com/s/1wj7v4kwq0wr65vqgpr3x79mba60e3oi](https://cmu.box.com/s/1wj7v4kwq0wr65vqgpr3x79mba60e3oi)

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The year-long “Atelier” studio integrates and coordinates instruction in fundamental architectural design principles, with closely related content from computing, representation, materials, construction, history, and theory.

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Carnegie Mellon University
Architecture Program Report for Initial Candidacy
March 2017 – Revised December 2017 | Page 55
Minor in Architectural History: The Minor in Architectural History is intended for those students that want to deepen their knowledge in architectural history. It is earned by completing the three required architectural history courses and then an additional four elective courses in architectural history.

Minor in Building Science: The Minor in Building Science is intended for those students that want to deepen their knowledge in the building sciences and for those who are interested in gaining advanced placement (AMP) in the M.S. programs offered by the School in the areas of Building Performance & Diagnostics and Sustainable Design. It is earned by completing the two required building technology and three environmental science courses and then an additional three elective courses in the building sciences.

Minor in Architectural Representation and Media: The Minor in Architectural Representation and Media is intended for those students that want to deepen their knowledge in architectural representation and media and for those who are interested in gaining advanced placement (AMP) in the M.S. programs offered by the School in the areas of Computational Design, Tangible Interaction Design and/ or Emerging Media. It is earned by completing the four required media courses and then an additional three elective courses in these areas.

Minor in Architectural Design Fabrication: The Minor in Architectural Design Fabrication is intended for those who wish to develop focused, disciplinary expertise in both analog and digital material methods for shaping the built environment and become involved in a community of practice dedicated to a rigorous pursuit of making as a mode of architectural research and cultural expression. It is also for students interested in gaining advanced placement in the SoA’s Master of Advanced Architectural Design (MAAD) program.

To maintain undergraduate or graduate full time status at Carnegie Mellon University, a student must register for 36 CMU units (12 credit-hours).

To graduate in the number of semesters as specified in official curricula, both the B.Arch and M.Arch programs require a minimum of 45 units per semester (15 credit-hours).

From the Carnegie Mellon Office of International Education (OIE) website,

“Carnegie Mellon continually seeks opportunities to partner with institutions abroad to exchange students, faculty, and researchers. Because of Carnegie Mellon’s active approach to making international connections, we have several exchange partners abroad. These programs are based on faculty relationships between the two institutions and have been evaluated for academic compatibility.

University Exchange Programs allow students, in most cases, to use their Carnegie Mellon funding while attending a university abroad. These programs are reciprocal. We also receive students from the institutions to which we send students. This allows Carnegie Mellon students to build friendships with the students from that institution both prior to and during the study abroad experience, providing a true cultural exchange.

Carnegie Mellon students participating in these programs continue to pay tuition (billed at the junior/3rd-year level) directly to Carnegie Mellon and receive, in most cases, the same financial aid package. Students are responsible for paying all other fees, such as room and board, directly to the
exchange institution.

Sponsored Programs offer study abroad opportunities to students from a variety of economic backgrounds and are ideal for students with significant Carnegie Mellon funding. Sponsored Programs allow students to pay regular Carnegie Mellon tuition, room and board (billed at the junior year rate) while receiving the same financial aid package (minus work study) while abroad. Offering Sponsored Programs reflects Carnegie Mellon’s commitment to ensure that all students have the opportunity to study abroad. While the main purpose of Sponsored Programs is to provide options that will allow the use of Carnegie Mellon aid, they are also programs that are researched and reviewed for academic quality and compatibility by our Study Abroad Advisory Board.

When choosing the Sponsored Program arrangement, Carnegie Mellon will pay tuition, room, board and approved fees to the study abroad institution or program and may distribute funds to the student for other fees as appropriate.

Departmental Exchange Programs function similarly to University Exchange Programs, except that the exchange is department-to-department instead of university wide. Many departments at Carnegie Mellon have exchange partners abroad. These programs are based on faculty relationships between the two departments and have been evaluated for academic compatibility.

Students in the B.Arch program have access to University Exchange programs with University of Melbourne, PUC- Santiago, Technion Institute of Technology, ISTEM Monterrey Tec, National University of Singapore, and Ecole Polytechnique Federale de Lausanne.

Students also have access to Sponsored Exchange programs in Australia, Denmark, Germany, Italy, Japan, New Zealand, Spain, and the United Kingdom and External programs in Australia, China, Czech Republic, Finland, France, Hong Kong, Ireland, Italy, Korea, Latvia, New Zealand, Poland, Spain, and the United Kingdom.

Study Abroad opportunities are available to fourth and fifth year students in B. Arch in through the Global Studio Fund (GSF). The GSF has supported study abroad in London, UK; Barcelona, ES; Bratislava, SK and Madrid, ES.

The Theater Architecture program has supported travel to Avignon, FR; Havana, CU; San Francisco, CA; Las Vegas, NV and New York City, NY.

The SoA subsidizes field trips in every year of the B.Arch curriculum in order to enable students and faculty to interact and learn from each other in very different settings than can typically be found on campus. The core studios in years 1-3 take an annual field trip to destinations such as Detroit, New York, Boston, Cincinnati or Cleveland. The new SoA Global Studio Fund, started by a donation from Head Steve Lee and his wife Yoko Tai, will enable global travel and study for architecture students, including M.Arch students. The small size of SoA’s M.Arch is a strategic asset: students all have the chance to be taught by, to interact with, and even to assist world-class faculty in a collaborative, and teamwork type setting that is essential to both deep learning, but also innovation and discourse.

—A list of other degree programs, if any, offered in the same administrative unit as the accredited architecture degree program, especially pre professional degrees in architecture and post-professional degrees.

Studio–based Programs

- Bachelor of the Arts in Architecture
- Master of Advanced Architectural Design (MAAD)
- Master of Urban Design (MUD)
- Master of Tangible Interaction Design (MTID) (F17 merged into MSCD)
STEM–based Programs

Master of Science in Architecture Engineering Construction Management (MSAECM)
Master of Science in Building Performance & Diagnostics (MSBPD)
Master of Science in Sustainable Design (MSSD)
Master of Science in Computational Design (MSCD)
Master of Tangible Interaction Design (MTID) (F17 merged into MSCD)

PhD & Doctoral Programs

PhD in Architecture Engineering Construction Management
PhD in Science in Building Performance & Diagnostics
PhD in Science in Computational Design
Doctor of Professional Practice (DPP)

*A description of the progress for changing the title of any non-accredited, post-professional degree that uses the degree title B. Arch., M. Arch. or D. Arch.

We do not currently offer post-professional degree programs that use the titles B.Arch, M.Arch or D.Arch.
II.3 Evaluation of Preparatory Education

The APR must include the following:

A description of the policy or policies regarding admission requirements and admissions decisions.

A description of the process by which the preparatory or pre-professional education of students admitted to the accredited program is evaluated. This description must include the process for verifying general education credits, professional credits and, where appropriate, the basis for granting “advanced standing.” These are to be documented in a student’s admissions and advising record.

NOTE: If applicable, SPC that are expected to have been met in preparatory or pre-professional education are to be documented in the top line of the SPC matrix (see Part II, Section 1.)

Unlike the undergraduate admissions for the NAAB accredited B.Arch, which is handled largely through the CMU central administration and admissions office, the admissions process for the M.arch is done completely in house, within the SoA. The process is led by the Track-Chair, with the assistance of SoA staff, and colleagues to help evaluate applications. The application and admissions process for the new M.Arch follows procedures very similar to the other SoA MS and PhD graduate programs in terms of timing and many protocols.

The new CMU SoA M.Arch program are currently in the midst of our first admissions season. Although we are building a 3-year professional accredited M.Arch, we are currently only accepting and enrolling Track-2 “advanced standing” candidates, who will required two years to complete the degree.

Applications and a description of the program and curriculum were made available on the SoA website in October 2016. The application deadline was Jan. 15, 2017, for Fall 2017 enrollment. We will only offer fall semester matriculation. All applicants to SoA M.Arch program had to complete the online application, which was done through www.slideroom.com, linked from our website. Alongside the typical personal data and dates, applicant had to submit: 1) a portfolio of creative work, 2) a statement of past accomplishments and future ambitions, 3) a CV, 4) three letters of recommendation, 5) baccalaureate and other graduate transcripts. They were also allowed to submit a link to a personal website, and one other pdf document that represented their accomplishments and promise. A GRE score is not required for the M.Arch (though it is for other SoA STEM-based masters programs). According to CMU policy, all international students whose first language was not English had to submit a recent TOEFL and/or IELTS scores. The SoA recommended minimum is a TOEFL score over 100 with a minimum of 23 on any one part, and/or IELTS scores over 7, with a minimum of 6 on any part.

We received many more applications than anticipated, from around the world, but also with a nice concentration of applicants who were connected to the Pittsburgh area, exactly as we had hoped. The track-chair looked carefully through all the applications, giving each a score and a comment. The primary criteria were a strong statement or portfolio, as well as sufficient strong coursework to allow them to gain “Advanced Standing” into the 2-year track of the M.Arch. Many applications were deemed to have insufficient experience to be granted “advanced standing” in the 3-year M.Arch. Other applications were dismissed because language abilities were too low to be considered. The smaller set of applications was then made accessible to the M.Arch admissions committee, who each gave scores on all applications. Discussions by the committee and decisions by the Track-Chair resulted in a shorter list of applicants that were ranked from strongest to weakest.

This list of candidates was divided into three groups, according to the amount of Merit Scholarship each candidate in the group would be offered, from a group that would receive a $25,000 scholarship to reduce the approx. $37,00 tuition, to a group that received $6,000 towards tuition, the minimum accorded to all grad students in SoA. These scholarships are contingent upon timely payment of tuition and successful completion of previous semester as a full time student. In addition, a limited number of Graduate Assistantships are available to full time master's students in the Fall semester, with a possibility of continuing in the spring. This assistantship entails working as an employee of the University for
The program offers part-time study at a rate of $15 per hour for up to 135 hours (up to $2,000), based upon full time enrollment. There are also opportunities for fellowships in the final year to teach in the undergraduate program, as well as existing faculty research projects that may offer assistantships and other funding opportunities.

Each admitted candidate was sent a congratulatory letter revealing their Merit Scholarship. Although they were given until Apr. 15 to decide and accept our admissions offer, we asked for them to accept or reject the scholarship offer by Mar. 1. We received many more deposits for admissions than anticipated.

In order to account for the vast differences between coursework, transcripts, and levels of experience and competence in our global applicant pool, and to insure that or “evaluation of preparatory education” in relation to the NAAB SPC is thorough and fair, M.Arch applicants will be sent a recommended curriculum chart and a description of all required courses. They will be allowed to petition to be exempted from courses that they feel duplicate part of their previous academic or professional experience. Decisions will be made by the M.Arch Track-Chair and admissions committee. Each candidate seeking to be exempted from specific courses will be asked to submit supplementary material, including syllabi and documentation of the kind of work they did in the previous courses, so that SoA can judge whether NAAB SPC were likely met. This rigorous process will insure that every candidate has met all the SPC by graduation after two years.

Each admitted candidate will work with the Track-Chair to create a unique curriculum schedule for their two years of study, based on background and previous experience, current interests, as well as future ambitions and career goals. The Track-Chair and graduate advisor will keep track of all previous coursework as well as all completed work through a chart that lists all CMU SoA M.Arch required courses, along with where, when, and how well they completed the coursework or its equivalent. Recognizing that every course at every university is somewhat different, we will work hard with each candidate to insure that all SPC have been met.
II.4 Public Information

II.4.1 Statement on NAAB-Accredited Degrees

NAAB Accreditation Statement for the Bachelor of Architecture Program
https://soa.cmu.edu/accreditation

II.4.2 Access to NAAB Conditions and Procedures

2014 NAAB Conditions for the Bachelor of Architecture Program
2015 NAAB Procedures for the Bachelor of Architecture Program

II.4.3 Access to Career Development Information

Career Development Information for the Bachelor of Architecture Program
https://soa.cmu.edu/career-development

II.4.4 Public Access to APRs and VTRs

2012 APR for the Bachelor of Architecture Program
https://soa.cmu.edu/s/2012_NAAB_APR_CMU.pdf
2012 VTR for the Bachelor of Architecture Program
https://soa.cmu.edu/s/CMU-VTR-2012-Public

II.4.5 ARE Pass Rates

NCARB ARE Pass Rates for the Bachelor of Architecture Program
ARE 4.0: https://www.ncarb.org/pass-are/are4/pass-rates/are4-pass-rates-school
ARE 5.0: https://www.ncarb.org/pass-are/are5/pass-rates/are5-pass-rates-school

II.4.6. Admissions and Advising

Admissions for the candidate Master of Architecture Program
https://soa.cmu.edu/march-application-requirements
Advising for the candidate Master of Architecture Program
https://soa.cmu.edu/student-organizations

II.4.7. Student Financial Information

Master of Architecture Program
https://soa.cmu.edu/grad-app-faq
General Carnegie Mellon Student Financial Information
https://www.cmu.edu/sfs/
Part Three (III): Annual And Interim Reports

III.1.1 Annual Statistical Reports:

The APR must include a statement signed or sealed by the official within the institution responsible for preparing and submitting statistical data that all data submitted to the NAAB through the Annual Report Submission system since the last site visit is accurate and consistent with reports sent to other national and regional agencies including the National Center for Education Statistics.

March 16, 2017

To Whom It May Concern:

The below information submitted to the School of Architecture at Carnegie Mellon University for their annual NAAAB submission is accurate and consistent with reports sent to other national and regional agencies, including the National Center for Education Statistics:

Section A, questions 9(a) and 9(b)
Section B, question 7, ‘B. Architecture’
Section D
Section E
Section G

Thank you,

Melissa L. Baker
Assistant Director
Institutional Research and Analysis
mibaker@andrew.cmu.edu
412-268-6342
III.1.2 Interim Program Reports:

These are NOT to be included in the APR. The NAAB will provide the following directly to the team at the same time as the VTR template and other materials:

These reports will be provided by NAAB headquarters.
The program shall provide a number of documents for review by the visiting team.

The general link to the SoA NAAB folder on the CMU Box is:
https://cmu.box.com/s/k8o30j8dq56qoy9ua7giblqas2fhztgo

Inside the SoA NAAB folder are:

Faculty Resumes:
https://cmu.box.com/s/xw0ya9snoieqw7tirv2stya6hwdy4k8d

Course Descriptions:
https://cmu.box.com/s/r0fi4mnrppf2k2nyxosrsnvv8u46l8rj

The following URL’s link to official SoA or CMU web pages:

Studio Culture Policy (contained in the Undergraduate Student Handbook):
https://soa.cmu.edu/s/2017-18_SoA-Undergraduate-Student-Handbook.pdf

Self-assessment policies and objectives:

Policies on academic integrity for students:
https://www.cmu.edu/student-affairs/ocsi/

Policies relative to computing and information resources:
https://www.cmu.edu/student-affairs/theword/acad_standards/creative/computing.html

Policies and procedures relative to EEO/AA for faculty, staff, & students:

Policies regarding opportunities for human resources professional development services:
https://www.cmu.edu/hr/resources/hr-partners/pds.html

Guidelines for faculty appointment, promotion, and tenure:
https://www.cmu.edu/policies/faculty/appointment-and-tenure-policy.html