**Philadelphia University**
College of Architecture and the Built Environment

# Architecture Program Report
# Initial Candidacy

For **2016 NAAB Visit**

**Master of Architecture** [preprofessional degree + 48 credits]
**Master of Architecture** [non-preprofessional degree +100 credits]

**Submitted to:**
**The National Architectural Accrediting Board**
September 2015

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[2015 NAAB Procedures/2014 NAAB Conditions]

# INTRODUCTION AND PROGRAM OVERVIEW

According to the Bureau of Labor Statistics, employment of architects is projected to grow 17% from 2012 to 2022, faster than the average for all occupations. The increased need for architects will result from current demographic trends: aging educational buildings, population shifts to the Sun Belt, additional healthcare facilities, nursing homes, and retirement communities. In addition, knowledge of sustainable (or "green") integrated design will be in demand due to rising energy costs and increased concern about the environment. Philadelphia University, through the College of Architecture and the Built Environment (CABE), has responded to this projected trend by developing the Master of Architecture program. Master of Architecture programs are a well-recognized educational path for professional architects, and have become even more popular in the recent past. The PhilaU program, particularly through the CABE core courses, emphasizes sustainable, integrated design and practice. This focus will appeal to two markets: career changers who will be attracted by the 3-year program, and students with a 4-year degree in an architecture-related field such as our own Architectural Studies, Interior Design, Landscape Architecture, or Construction Management degrees.

Philadelphia University's Master of Architecture Program is a first-professional graduate degree program designed to prepare students for the new challenges of professional architectural practice in the 21st century through the development of high-level sustainable design and technology skills, knowledge of project management and innovative delivery methods, and collaborative experiences in an interdisciplinary environment. This graduate program will join and complement the already proven NAAB accredited PhilaU 5-year Bachelor of Architecture program.

The M.Arch program is designed for students with undergraduate degrees in any field of study and offers advanced standing for students with undergraduate degrees in pre-professional architecture or related design programs, such as interior design, historic preservation or industrial design.

The 48 to 100 credit curriculum can be completed in two to three academic years. Placement in the program for students with advanced standing depends on previous education and experience. The Master of Architecture program is composed of approximately 75% of our existing undergraduate and graduate courses. Elective courses will come from existing curricula in other master's programs: GeoDesign, Interior Architecture, Sustainable Design, and Construction Management, as well as cross-listed Architecture courses. Additional elective courses may be selected from other programs such as Engineering, Health, and Business to leverage the strengths of the other Colleges and of the University at large.

In the Fall of 2015, the first cohort of students with an undergraduate degree in pre-professional architecture or related field will begin the program. Beginning in Summer 2016, two foundation studios will be offered to the first cohort of students with an earned bachelor's degree in a non-architecture field.

The Master of Architecture program will benefit from and contribute to the highly successful existing interdisciplinary academic model at Philadelphia University (see The **University and the Architecture Program** as it relates to the Philadelphia University Strategic Plan, pp.9-10). The many facilities and technological resources of CABE continue to develop and evolve and provide the M.Arch. program with a solid foundation on which to build.

The Master of Architecture program is a graduate program with a professional bias and outcome. The general profile of these students is post-graduates including those with some professional working experience. The courses are structured to support integrated and experiential learning combined with the students' academic and professional experience.

### The Program's Progress on *The Plan for Achieving Initial Accreditation*

With strong institutional administrative leadership at Philadelphia University, the M.Arch program has received tremendous support from the President's office, Provost, Graduate Admissions, University Registrar, as well as the Executive Dean in the College of Architecture and the Built Environment. Since the writing and submission of the *The Plan for Achieving Initial Accreditation,* the program has steadily

moved forward. The program secured a graduate assistant to help in the gathering of documents for the *Plan* as well as the APR-IC. Graduate Admissions has been aggressive in recruitment; we currently have five students with advanced standing with a possibility of adding several more (Spring 2016) for the 2015-16 academic year. Additionally, all M.Arch courses, save one (MARCH-616 Design 6 Thesis) have been developed and approved at all levels at the University

The central location of architecture programs, the Architecture and Design Center (A+D), houses the offices of Executive Dean, Associate Dean, Architecture Programs Director, and now the M.Arch Program Associate Director, as well as studios for B.Arch and M.Arch students in addition to the CABE exhibitions gallery. This past summer, a major interior retrofit was completed in A+D that included the installation of the A+3-D Lab for 3-D printing, upgraded studio furniture that includes computer monitors for each student workspace, electrical upgrades to allow all students to run laptop computers and desk-mounted large-screen monitors simultaneously, and a repainting of the building interior.

At the University level, two new Active Learning Spaces “Nexus Learning Hubs” have been recently added in addition to the two launched last academic year. The *Active Learning Space Initiative* is the institution's commitment to providing learning environments that enhance Nexus Learning teaching approaches. Last academic year, through surveying more than 500 students using the two inaugural Nexus Learning Hubs, students self-reported significant gains in class participation, ability to focus, instructor feedback opportunities, learning through multiple means, physical movement, stimulation, and comfort level (in addition to other gains) in classes taught in Nexus Learning Hubs compared to traditional classrooms. Using other assessment tools such as class observations and faculty surveys and discussions, it was discovered that these learning spaces are highly valued as environments where space and technology optimize the teaching experience for our faculty and learning experience for our students. Bringing various University stakeholders together this past spring, the Active Learning Space Initiative guided the scale up/scale out of the Nexus Learning Hubs, which are providing additional innovative, flexible and stimulating learning environments to our campus. It is fully expected that our M.Arch students will take at least one if not several courses in an Active Learning Space.

In preparation for a Middle States Commission on Higher Education (MSCHE) visit during the 2015-16 academic year, the M.Arch program prepared a program assessment plan that will assist the program administrators and faculty to more easily evaluate and refine the program on a regular basis. This assessment plan is a key to maintaining the program’s currency and success. More critical still are the planned initial candidacy visit and anticipated initial accreditation visit—assessment visits that offer greater program scrutiny and invaluable feedback. We welcome the initial candidacy visiting team, and look forward to receiving their observations, comment, and guidance.

We are now making preparations for a NAAB team visit for Initial Candidacy scheduled for spring 2016.

# SECTION 1: Program Description

## I.1.1 History and Mission

**History of Philadelphia University**
Philadelphia University was founded in 1884 as the Philadelphia Textile School in the wake of the 1876 Centennial Exposition. Led by Theodore Search, a group of textile manufacturers noticed a sizable gap between the quality and variety of American textile products and those displayed by European mills. To address this, the group established the School to educate America's textile workers and managers. The Philadelphia Textile School entered a period of growth at the outset of World War II, when it was granted the right to award baccalaureate degrees and changed its name to the Philadelphia Textile Institute. Following the war, it moved to its present site in the East Falls section of Philadelphia. Continued growth led the institute to become the Philadelphia College of Textiles & Science (PCT&S) in 1961. Over the decades, the campus grew through the acquisition of adjacent properties, and academic offerings expanded to include programs in the arts and sciences, business administration, and architecture and design. Reflecting the institution's breadth and depth, in 1999 the College was granted university status by the Commonwealth of Pennsylvania and became Philadelphia University. The most recent academic reorganization of the University, in July 2011, resulted in the creation of three colleges: the College of Architecture and the Built Environment (formerly the School of Architecture); the College of Design, Engineering and Commerce (formerly the Schools of Design + Media, Engineering and Textiles, and Business Administration); and the College of Science, Health and the Liberal Arts (formerly the Schools of Science and Health and of Liberal Arts). The current University mission is presented in the *Employee Handbook* (*EH*, revised 6/2014):

*"Philadelphia University is a student-centered institution that prepares graduates for successful careers in an evolving global marketplace. By blending the liberal arts and sciences, professional studies, interdisciplinary learning, and collaborations in and out of the classroom, students learn to thrive in diverse and challenging environments. Our students are encouraged to form supportive relationships with each other as well as faculty, staff, and alumni in an academically rigorous setting that is focused on intellectual and personal growth. Philadelphia University is an experiential learning community where integrity, creativity, curiosity, ethics, responsibility, and the free exchange of ideas are valued."* (*EH*, 1.2)

All faculty are evaluated annually on their contributions to the University's seven strategic initiatives, ensuring that the initiatives are integrated into the daily life of the University community. The strategic initiatives are:

- Formalize the Philadelphia University "Signature Learning" (now called "Nexus Learning") to distinguish the University's educational experience.
- Promulgate an academic learning community that will embrace the key elements of the design, engineering, and commerce curricula where constant collaboration and teamwork are the keys to creating successful leaders.
- Advance applied research to serve signature learning, industry, and societal needs.
- Invest in academic strengths to create leaders in the professions.
- Provide, increase, and enhance distinctive opportunities for graduate and professional students.
- Develop innovative facilities to enhance 21st century learning.
- Integrate student coursework with purposeful and intentional learning outside the classroom.

The University is accredited by the Middle States Commission on Higher Education and other discipline-specific organizations such as the National Architectural Accrediting Board, and is a member of the American Council on Education, the College Entrance Examination Board, and the Pennsylvania Association of Colleges and Universities.

**History of the Architecture Program**
Traditionally strong in textile engineering and science, PCT&S began expanding its design programs based on the technical foundations within those fields. The Architecture Program evolved from a single interior design course started in 1980 as a service to the textile-related programs. Eventually this led to the Interior Design Program as a full-time day program leading to a Bachelor of Science degree in 1985. The College introduced the Bachelor of Architecture Program in 1991 under the leadership of Program Director Gary Crowell, AIA. Over the next 14 years, Prof. Crowell served as the chair of the Department of Architecture and Interior Design, then Dean of the School of Architecture + Design, and until 2007, Dean of the School of Architecture. With Prof. Crowell as Architecture Program Director, the program received its initial NAAB accreditation in 1997 and subsequent renewals in 2000, 2006, and 2012.

In 2007 the positions of Dean and Architecture Program Director were divided between two people and over the next four years additional administrative positions were created: Associate Dean, Assistant Dean for Graduate Programs, and Manager of Academic Operations. Those changes were partly in response to the NAAB self-study process and site visit team observations and reflect the growth in program size, the number of related programs, and the continued evolution of the institution and campus-wide strategic planning. The Interior Design and Architecture programs' immediate progeny are the undergraduate programs in Architectural Studies, Graphic Design Communication, Industrial Design, Digital Design, Landscape Architecture, and Construction Management, and graduate programs in Sustainable Design, GeoDesign, Construction Management, and Interior Architecture. The School of Architecture was elevated to a College of Architecture and the Built Environment as part of an institutional restructuring in 2011, and is now headed by Executive Dean Barbara Klinkhammer. In December 2010, the full-time faculty of the architecture program approved an updated mission statement, which is included in the 2014-15 academic catalog:

*"The Architecture Program at Philadelphia University prepares students to engage critically in the complex discourse of architectural practice and theory. In keeping with the University's legacy of craft, materials, and technology, the curriculum balances the creative and technical aspects of making architecture. Through research, analysis, and exploration, students discover that design is found at the dynamic intersection of our social and physical environments. Faculty with diverse perspectives guide students in their investigations of contemporary issues that supersede trends. Encouraged by interdisciplinary study, they craft varied ideas for the environment, finding passion and delight in the consideration of architecture*."

Currently, the Architecture Program, with approximately 300 undergraduate and graduate students, is one of the larger programs on campus and is housed in multiple buildings. Aligned with the University's traditions, the Program focuses on providing a solid professional education for the next generation of architects aided by its associations with the Center for Teaching Innovation and Nexus Learning, study abroad programs, the internship program, service learning studios, and other opportunities, most notably the interdisciplinary opportunities provided by its context within in the new College.

In the fall of 2012, Executive Dean Barbara Klinkhammer and architecture program faculty began discussions on the feasibility of graduate degree programs in architecture. In June 2013, a report prepared by Hanover Research presented favorable evidence that Philadelphia University could support a post-professional M.S. Architecture program and a professional M.Architecture program. In 2013, Professor James Doerfler was recruited to Director of Architecture Programs. In 2014, he then expanded CABE graduate offerings with a M.S. Architecture program that fuses design, engineering and industry, emphasizing market-driven innovation. Also in 2014, Professor Doerfler named Professor Donald Dunham as M.Arch. Associate Director to assist in the development and University approvals of curricula, student recruitment, and coordination of the accreditation process for a Master of Architecture program.

**The Master of Architecture Program**
The M.Arch. degree will prepare students for professional architectural practice, through the development of sustainable design and technology skills, knowledge of project management, and collaborative experiences in an interdisciplinary environment.

Specific program outcomes include:

- Recruiting, admitting, and retaining highly motivated, academically capable degree candidates with a diversity of cultural and life experience backgrounds.
- Maintaining and enhancing a curriculum based on CABE core values of collaboration, innovation, and sustainability.
- Applying an integrated design process that synthesizes ecological and social responsibility, cultural significance, design excellence, and economic viability.
- Learn and incorporate innovative technologies including Building Information Modeling (BIM), GIS/advanced spatial modeling, and Integrated Project Delivery (IPD) into the planning and design process.
- Participate in applied research to expand the knowledge of the discipline.
- Engage in experiential community-based projects to find strategies that result in creative solutions that will positively impact communities.
- Pursue partnerships with industries, state and local agencies, community entities, and professional organizations for possible joint projects, grant opportunities, and sponsorships.
- Graduate students who will be responsible professionals and become leaders in the field. This degree will also allow graduates to be eligible to sit for the Architect Registration Exam, a key component along with the architectural internship that leads to professional licensure.

**The University and the Architecture Program**
Today, due in part to the several design programs which grew out of Architecture and Interior Design, nearly one-half of the University student population is studying design. The Architecture faculty has collaborated with colleagues across the University to foster interdisciplinary activities. In addition, the College engages the University and adjacent neighborhood communities through exhibitions, lectures, and various studio-based research and design projects.

The seven initiatives that provide the outline of Philadelphia University's strategic plan are provided below with notes describing how the Master of Architecture builds upon these themes.

*i. Formalize the Nexus Learning Approach:* Nexus Learning is the University's signature learning approach with engaged, collaborative, active learning that is infused with real world issues. The design studios and core courses support the Nexus objective of Active Learning; the keystone learning objective supported by this program is Collaborative Learning. It is the intention to have several M.Arch. design studios in the sequence participate in collaborative projects with students working in other majors across the College as well as the University. The program will utilize courses from the Architecture and Sustainable Design programs with the expectation that students will take elective courses from the Construction Management, GeoDesign, Interior Architecture, and Landscape Architecture programs; consequently, students will interact with a range of disciplines. In general, there is a strong potential for interdisciplinary research and design opportunities across Colleges under the umbrella of the program.

*ii. Achieve innovation:* The Master of Architecture Program will practice innovation through the CABE mission of innovation, collaboration, and sustainable practice. Collaborative, interdisciplinary think-tank programs such as "Nexus Maximus" spawn innovation. This program will be the embodiment of inter-college collaboration.

*iii. Advance Applied Research:* The Master of Architecture provides opportunity for students (and faculty) to participate in a broad range of applied research with both agency and industry-sponsored support. Similar to the MS Architecture program, students will also be able to work on both theoretical/basic and applied research.

*iv. Invest in Academic Strengths:* The Master of Architecture Program strengthens the already proven Architecture Program by furthering connections to local industry and allowing for additional research partnerships. In addition, it will also provide more reciprocal relationships with local, regional, national, and international architects and academics as our graduates enhance and expand their professional and academic networks.

*v. Build Graduate and Professional Programs:* The Master of Architecture fits the strategic plan initiatives that support regional leadership in career-oriented graduate programs. This program supports the following six key areas:

a. Multidisciplinary, integrated, differentiated, quality-focused and globally-oriented.
b. Professional education in fields that need graduates and involves interactions with the professions.
c. Grounded in scholarship, research, and practice that is basic and applied, professional and practical, and linked directly the professional world.
d. Program leaders are responsible for the impacts of investments and their responsibility is consequential.
e. Delivered in a student-centered framework where academic life, student life and University services are integrated.
f. Delivered in the context of the nexus learning model that is dynamic and evolving as the professions change and develop.

*vi. Develop Innovative Facilities:* The Master of Architecture program will benefit from the interdisciplinary academic model at Philadelphia University. The facilities and technological requirements will develop and evolve as this program matures. The nature of this program will demand a real-time response to the needs of the industry, the concentration and the individual student. This dynamic will influence the physical and technological requirements of the program over time.

*vii. Integrate Curricular and Co-Curricular Learning:* The Master of Architecture program is a graduate program with a professional bias and outcome. The general demographic profile of these students is mature post-graduates including those with some professional working experience. The courses are structured to support integrated and experiential learning combined with the students' academic and professional experience.

## I.1.2 Learning Culture

**Location**
Philadelphia University offers an intimate campus, sitting on the edge of Philadelphia's Fairmount Park while also being in close proximity to downtown Philadelphia. Both the natural and urban settings provide "living laboratories" for students' academic growth, which is a large draw for student's applying to an architecture program.

**Teaching + Advising**
Although Philadelphia University is a relatively small institution, it prides itself on high quality teaching. Class sizes are kept small to encourage interaction between faculty and students, and among students themselves. In the B.Arch. program, classes are capped at 30 students, foundation studies courses at 15 and upper level studios at 12. The M.Arch. program will also maintain these numbers. Every student is assigned an academic advisor upon arrival to the University. The advisors are full time architecture faculty, with a breadth of knowledge not only about the Architecture Program, but the university at large. Advisors are encouraged to become acquainted with the students, learn their backgrounds, follow their academic performances, discuss and assist in charting their progress through the University by counseling them regarding the courses they are to take each semester, as they progress towards graduation. For a description of student support services, including academic and personal advising, career guidance, and internship placement where applicable, see: **SECTION 3 Part I.2.1 Human Resources,** Academic Learning and Advising.

**Participation**
The Architecture Programs' administrators, faculty, staff, and students are involved in the ongoing policy initiatives of the University. They populate the membership of groups from standing committees to task forces. For example, in July 2013, Susan Frostén, Associate Professor in the College of Architecture and

the Built Environment, became the Associate Provost. Susan is a central participant in major academic planning efforts at the University, including the Academic Growth Plan, new program development, online initiatives and serving as liaison with the deans, faculty, and faculty governance bodies to support and advance academic planning efforts.

**Learning**

*STUDIO*
Experiences within the studio are the backbone to the M.Arch. degree program. The culture that is encouraged and maintained in the studio supports the academic goals set out by each studio instructor. The College of Architecture and the Built Environment's *Studio Culture Document* is the result of a student-faculty collaboration that extended over two semesters. From fall 2010 to spring 2011, a student-faculty committee was chaired by the Architecture Program Director and included two students, three full-time faculty – representing Architecture, Interior Design, and Landscape Architecture – and one adjunct faculty. This document is handed out to students at the beginning of each semester, as well as posted in studio locations and on the College's website. The Studio Culture document is reviewed on a regular basis to assess its effectiveness and provide an opportunity for improvement. See **SECTION 4 Supplemental Materials, ii. Studio Culture Policy** for the CABE *Studio Culture Document.*

*NEXUS LEARNING*
Philadelphia University recently defined and developed Nexus Learning, a campus-wide program to promote interdisciplinary work. The program is known as the PhilaU "X-Factor" because it crosses active, collaborative, real-world learning and with a strong liberal arts foundation. Although the M.Arch. students will have already completed their liberal arts core at a prior institution, the energy and collaboration sparked by Nexus Learning will greatly affect their academic experience. Collaboration with other College and University programs is commonplace and will be incorporated into the M.Arch. program.

*ORGANIZATIONS + PROFESSIONAL SOCIETIES*
Through the Student Government Association and other co-curricular efforts, students have multiple ways of creating a larger sense of community and of impacting University policies and practices. Philadelphia University's B.Arch. Program has a maintained a strong chapter of the AIAS, which will offer opportunities for the M.Arch. students to engage in conversation with fellow students of Architecture throughout the country. For other student co-curricular organizations and opportunities, see **PART ONE/I: SECTION 2: Resources 2.1 Human Resources and HR Development: Resources to Support Student Learning.**

**Harassment and Discrimination**
*"Philadelphia University complies with Title IX of the Education Amendments of 1972, the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964, and all other applicable federal, state, or local laws regarding unlawful discrimination. Philadelphia University prohibits discrimination on the basis of ethnicity, national origin, ancestry, race, color, religion, creed, sex, marital status, sexual orientation, gender identity, age, disability, veteran status, and any other characteristic protected by state law, federal law, or local ordinance in hiring, employment opportunities, education programs, and any other activities sponsored by the University. Furthermore, the University does not tolerate or condone any form of sex discrimination, sexual harassment or sexual violence. Any unlawful employment discrimination, sexual harassment or sexual violence perpetrated by administrators, faculty, staff, students, employees, independent contractors, vendors, or any other third-parties involving members of the Philadelphia University Community is a violation of this policy. Once the University has notice of an incident involving unlawful discrimination, the University will take prompt and appropriate steps to investigate the incident. Thereafter, the University will take remedial action to address confirmed incidents of unlawful discrimination a, and will use measures reasonably calculated to end any harassment, eliminate a hostile environment (if one was created), and prevent any future harassment."* (*Employee Handbook,* 2.5.1.D)

The *Student Handbook (SH)* also refers to the non-discrimination policy and can be read here: http://www.philau.edu/studenthandbook/2014-2015/nondiscrimination.html.

Students wishing to file a grievance against faculty, staff, or administrator for a non-academic and/or non-harassment issue are encouraged to communicate directly with the office(s) or person(s) with whom they have the grievance in order to resolve the issue; however, if they feel that the issue has not been adequately resolved or if they need additional support or feel threatened, they may seek counsel from the Office of the Dean of Students which investigates the matter and works toward a solution. The Office of the Dean of Students is responsible for the administration of the University Judicial System and coordinates crisis management.

Since harassment threatens a professional learning and working environment because it compromises institutional integrity and negates traditional academic values, it is University policy to investigate promptly and attempt to resolve any allegations of harassment. The grievance procedures (informal and formal complaints) for students are explained in the *Student Handbook* and can be accessed at the following link: http://www.philau.edu/studenthandbook/2014-2015/studentlifepolicies/grievances.html. Informal, confidential counseling by suitably trained individuals is available to students, staff or faculty members who feel they are a victim of harassment. The University requires all full-time and adjunct faculty and staff to complete an online harassment course specific to the academic environment every three years.

**Academic Integrity**
The community Code of Conduct (with explanation of Disciplinary Action) and the Code of Ethics are presented in the *Employee Handbook* section 2.5.12. The University's Community Standards seek the promotion of a civil and safe environment for all community members and the University Judicial System enforces that through various means: professional staff members of the Division of Student Life, Dean's Committee, faculty, and the Student Conduct Committee.

Specifically with regard to academic dishonesty, the 2014-2015 Student Handbook, Graduate Student Academic Policies and Procedures states:

*"All members of the Philadelphia University learning community are entrusted with respecting and maintaining its Academic Integrity Policy (hereafter referred to as "AIP"), whether instruction occurs in-person, online or hybrid. Violations are taken very seriously, as the AIP reinforces the values of original thinking and the recognition of the effort and work of others. Anyone violating this trust harms not only themselves but also the whole learning community (students, faculty, and staff), and the rights of all members of the University and professional communities are compromised."*

Academic dishonesty is defined by the broad categories of cheating (the inappropriate and unacknowledged use of materials, information, designs, ideas or study aids in any academic exercise; and/or selling or transferring tests or other assignments including designs); fabrication (falsifying or inventing any information or citation in an academic work); plagiarism (the representation of the words or ideas of another as one's own in any academic exercise); facilitating academic dishonesty (knowingly or negligently); and denying others access to information or material (stealing or defacing library holdings, altering computer files, etc.).

All University syllabi include a section on academic integrity. The University has adopted policies that both emphasize the imperative of academic integrity, and also protect the rights of all members of the University community. More information may be found at the following: *http://www.philau.edu/catalog/UniversityAcadPolicyProcedures/GradStudentAcademicPandP/index.html#AcadInt*.

To graduate, graduate students must pass all required courses (for the M. Arch curriculum presented in this document, 48 credits) and have a cumulative grade point average of 3.0 or higher.

## I.1.3 Social Equity

"Philadelphia University is fully committed to making diversity an integral part of its mission. Creating a truly pluralistic community requires continuous effort. To make it happen, each member of the community must strive to work and learn together in an atmosphere of understanding and acceptance. Today's Philadelphia University community is founded upon multicultural opportunity. It is committed to cultural diversity, and the principles of openness, positive self-identity and fair play. The University community respects the uniqueness and worth of each member, based on mutual sensitivity, responsiveness and civility. Our vision sees enlightened students, faculty, administrators, staff, alumni and trustees living together in harmony, in ways that set an example of a just and humane society." (2014-2015 Student Handbook, *Commitment to Diversity, http://www.philau.edu/studenthandbook/2014-2015/diversity.html)*

Co- and extra-curricular activities have a role as well in this regard. The Student Development Office has several programs that address diversity and social justice, including: LEAD (Leadership, Engagement, Assessment, Development), a co-curricular certificate program designed for upper-class students looking for leadership development opportunities that will contribute to their personal development and help achieve their leadership potential; a Safe Zone program for gay, lesbian, bi-sexual, and transgendered (GLBT) students and their allies.

Achieving diversity within the Architecture Program is a goal bolstered by efforts to bridge the College with local organizations dedicated to minorities in design. In the Spring of 2011, working with Elizabeth Bramwell, the Northeast region's University Liaison for the National Organization of Minority Architects (NOMA), the Program Director was able to identify a core group of minority students interested in helping to resurrect our program's involvement after several years of inactivity. In the Fall of 2014, Philadelphia University was the Official Host and Chapter Party Sponsor for the NOMA Conference, which further highlighted the commitment from the college to recruit and maintain minority students.

Furthermore, as part of academic planning, the Provost is working with the educational consulting firm Educational Advisory Board to analyze the current body of the faculty, its distribution, and faculty-student ratios. The University recognizes the pressing need to increase and diversify the number of full-time faculty in terms of age, race, gender, ethnicity, scholarship, and expertise. Since 2009, three of seven hired full-time Architecture Program faculty have been minority members, which is testament to the goal of increased diversity. When recruiting part-time faculty, the Program Director similarly seeks to increase diversity in terms of race, ethnicity, and gender. Adjunct faculty member Evan Pruitt has been working closely with Associate Director of the M.Arch program, Donald Dunham, in developing the M.Arch curriculum as well as course syllabi and materials. She has also been key in preparing NAAB materials in addition to her planned role to assist in organizing the upcoming NAAB team candidacy visit in addition to teaching in the the M.Arch program (MARCH-601 Intro to Design and MARCH-614 Design 4). We believe faculty diversity is fundamental to success in architectural education.

## I.1.4 Defining Perspectives

As part of the College of Architecture and the Built Environment, the Master of Architecture program is bound by the CABE pedagogical philosophy which aligns with NAAB's 2014 Conditions for Accreditation "perspectives." The College of Architecture and the Built Environment Guiding Principles, Vision, and Mission:

***Guiding Principles:*** *With a commitment to educating the next generation of leaders for a sustainable future, the College of Architecture and the Built Environment's guiding principles include: Sustainability, Innovation, Interdisciplinary Collaboration, Social and Ethical Responsibility, Stewardship of the Environment, Design Excellence and Creativity, Global Perspective, Cultural Diversity*

***Vision:*** *To be recognized as the educational leader in sustainable integrated design and practice.*

***Mission:*** *Through innovation and interdisciplinary collaboration, the College of Architecture and the Built Environment is committed to educate the next generation of leaders for a sustainable future.*

We are committed to providing:

- The PhilaU Nexus Learning approach that includes an active, collaborative, real-world experience, informed by applied research and critical inquiry infused with the liberal arts.
- An educational environment that encourages entrepreneurship and innovation.
- A unique combination of disciplines providing an unparalleled opportunity for interdisciplinary collaboration.
- A student-centered approach to a professional education taught by highly accomplished faculty.
- A balance between theory and practice with a focus on design excellence and making.
- Curricula structured to acquire the knowledge and skills necessary for global sustainable practice.
- Engagement with the professional community and industry partners in one of the greatest cities in North America.

**COLLABORATION AND LEADERSHIP**

Philadelphia University has fostered collaboration across the University. This has been accomplished through the professional and liberal-arts-based realms so all members help develop new knowledge. Philadelphia University offers all its students a blend of professional and liberal education, crafted in such a way as to have the two strands reinforce one another. The undergraduate Hallmarks Program (formerly College Studies) helps prepare students to be leaders in their field. *The Hallmarks Program for General Education at Philadelphia University empowers students to:*

- Question, based on curiosity and confidence
- Adapt, based on contextual understanding and global perspective
- Contribute, based on empathy and collaboration
- Act, based on initiative and ethical reflection with the goal of imagining and realizing better futures.

Within that framework, undergraduate and graduate programs have leveraged this challenge. Collaborative, interdisciplinary, and individual self-directed projects have transformed the University learning environment. Architecture faculty are committed to the University's focus on quality teaching. In the last decade, several faculty have been awarded one of two competitive prizes – the President's Award for Teaching Excellence and the Lindback Distinguished Teaching Award. All full-time faculty consult with colleagues from across the University to ensure our course goals are appropriately connected to our students' learning experiences in other classes, as well as connected to work done by our students with writing tutors and others in the Learning Center. These practices have now become more structured due to the inauguration of assessment and Nexus Learning advocates for each College.

Architectural education, revolving around the studio experience, has traditionally been a dynamic, collaborative, hands-on, and (often) interdisciplinary activity. As University priorities have moved heavily in that direction (Nexus Learning), the design-based faculty and students have seen peers in other University programs move nearer to collaborative pedagogy in their teaching and learning methods. The Colleges fosters this type of education (Nexus Learning), and Architecture faculty and students both mentor peers across the University and have been recruited as counterparts in multidisciplinary collaborations. Architecture faculty have served on the Signature Learning Action Team, which involved overseeing an ePortfolio pilot as well as chairing the DEC (Design, Engineering and Commerce) Research Innovation Grant Committee (later called the Nexus Grants); participating in the DEC Foundation and First Year Curriculum Working Group; and the in the SERVE-101 Learning Community. Current Associate Provost and architecture faculty, Prof. Susan Frostén, supervised a two-semester-long project on a fueling station of the future (Sustainable Station +), which involved faculty and students from graphic design, business, and economics of sustainability. Beginning Spring 2012 architecture professors David Kratzer and Donald Dunham collaborated with Library Director Karen Albert and an assembled

design and planning team comprised of University faculty from two other Colleges, staff, and exhibition professionals on a proposed exhibit to highlight Pennsylvania Senator Arlen Specter's key role on the Warren Commission. During Spring and Fall 2013, student teams from architecture and graphic design designed and fabricated the exhibition entitled *Single Bullet: Arlen Spector and the Warren Commission Investigation of the JFK Assassination*. The exhibition, installed in the University library, won the 2014 Philadelphia University Nexus Learning Award. Single Bullet has been subsequently acquired by the Battleship New Jersey American History Museum as a permanent exhibition. Using grant funding, Prof. Kratzer and his students collaborated with industrial designers and occupational therapists to design an adaptable hygiene station for universal use. These and other instances help faculty become better instructors and help students learn about their field of study outside the conventional classroom format. As suggested above, Architecture Program faculty often assume leadership roles on College and University-wide committees, and are routinely elected by their peers across the institution to at-large positions on standing committees. Two of the last three chairs of the University Tenure Committee have been Architecture faculty.

Faculty continue to deliver papers at academic conferences (at ACSA Annual Meetings and other venues), enter design competitions, and pursue professional practice, thereby remaining engaged in their respective realms of scholarship and practice. In short, architecture faculty (as well as students) contribute significantly to the academic progress of Philadelphia University. Administrators across campus seek their involvement in diverse ways from pedagogical initiatives to scholarship and practice to faculty governance.

An indication that our students are receiving a quality holistic education: 97% of architecture graduates as of 2014 are employed. Alumnus Skylar Tibbets (B.Arch. 2008, M.S. Design and Computation, MIT), is currently a Research Scientist in MIT's Department of Architecture and was awarded a TED 2011 Fellowship. The Architecture Program students are no less prominent on campus. Our students have been elected to top positions in student government, participate in many extra-curricular events, have a reputation for being thoroughly engaged in classes across the University, and are respected for their visible dedication to the profession they are preparing to enter. In spring 2011, a group of fifth-year students from the Haiti Ideas Challenge Design X studio were invited to attend the University President's annual Innovation Gala in Center City and screen a video they recorded of them building a prototype post-earthquake shelter on campus. In 2012, a collaborative team consisting of interior design and architecture students from the architecture and interior design Design 6 interdisciplinary studio (M.Arch. Design 4), took first-place overall in the ACSA/AISC Student Design Competition.

**DESIGN**

It is our expectation that graduates of the Master of Architecture program are ready to function in a global world and they wholly respect diversity, distinctiveness, self-worth, and dignity; to become academic and professional leaders; to make responsible choices; and to continue to learn. Learning to thrive in a multicultural environment is a lesson reinforced by curricular, co-curricular, and extra-curricular experiences. Working at a small teaching university, staff and faculty take seriously the opportunity to expose all students to challenges abundant in and around the city. Philadelphia is a crucible of early 21st-century life in America, and a good springboard for students exploring the global context. With a plethora of experienced adjuncts teaching in the M.Arch. program, this provides a range of approaches for teaching design in the studios: some professors encourage one design process while others may follow a different design approach, ultimately exposing students to a range of ways to approach design. Whether through experiential explorations, evidence-based design, or computational design methods, students in the program will have the opportunity to apply different approaches to a multitude of design problems—urban, rural, high-performance building research, etc.—all considered through a sustainable filter. In addition, some studios rely on a greater use of technology, others offer a balance between digital and amalog, while others employ hand-making/building as a pedagogical design tactic.

In the M.Arch. design, history, technology, and other courses, students will be simultaneously exposed to the wealth of architectural accomplishments as well as to the shortcomings in the built environment

around the globe. In 2007 the College established its first graduate program in Sustainable Design, and subsequently made sustainable architecture an important front-and-center topic. This has led to the "CABE CORE" sequence of course offerings by the MS Sustainable Design Program that is a required CABE graduate programs' keystone. For the M.Arch. students will take the 4-credit Sustainable Design Studio along with a 2-credit Landscape Ecology Seminar. In addition, MARCH-645 Technology 5, the technology capstone course and MARCH-615 Design 5, the comprehensive design studio, reinforce a sustainable approach to building. Our long-term goals are to make sustainable principles second nature to the students, helping them to be better architects and better citizens, and to intersect more consistently with the graduate students, faculty, and courses in the Sustainable Design Program. As we are located in Philadelphia, with its diversity of urban and suburban settings, the M.Arch. program offers multiple studio projects that present students with ethical issues, especially in the MARCH-614 Design 4 studio that concentrates on urban issues and architectural programming. Past examples from the B.Arch. cross-listed courses had students participating in an exercise to design a new facility for Habitat for Humanity's Re-Store, a prototypical shelter for survivors of the Haiti earthquake, and working with the Archdiocese of Philadelphia's homeless services coordinator to address the city's acute housing shortage in low-income neighborhoods.

Our Studio Culture Policy developed in 2012, reiterates the word "respect" (a student's suggestion) to reinforce a healthy attitude in all learning experiences (see "Learning" in **PART ONE/I: SECTION I: Identity and Self-Assessment: Learning Culture**). The challenge and intellectual stimulation of "constructing knowledge" and the rewards of student learning delineate the signature of an architectural education. Often the pedagogical strategy in architecture is described as "architectural training." Architects are educated not trained; in addition to a broad humanities education, the architectural student is immersed into a study of the built environment through case studies, building visits (and ideally study "away"), and studio work. At the nexus of these often complex and esoteric pursuits, is studio culture. This foundation signature is unique to every student and school; like a bar-code, studio culture is the personal signature of the architect's design education.

Other opportunities exist beyond the studio for students to engage design: design/build, service learning in collaborative architecture and landscape architecture studios, study abroad in post-apartheid South Africa – are options graduate and undergraduate students have recently chosen which expose them to the breadth of professional opportunities. The University's Strategic Plan spotlights lifelong learning; by presenting architecture as an enjoyable path of discovery, we hope to reinforce that attitude. Our undergraduate alumni are increasingly choosing to enter graduate programs in architecture, planning, social work, and other fields. While this points to an obvious indication of lifelong learning, faculty are equally proud of the more informal educational experiences our alumni partake in whether they remain in the architectural profession or choose other careers.

Consequently, it is our belief that through varying yet rigorous pedagogical narratives, students will develop design skills and motives that provide agency to architectural innovation. It will be critical for future architects to be complicit in solving complex socio-spatial problems—problems that we have yet to realize.

**PROFESSIONAL OPPORTUNITY**

Our Master of Architecture Program attempts to provide opportunities for students to experience architecture as a real-world activity. Most design projects in the architecture curriculum (B.Arch./M.Arch.) are assigned on sites readily accessible to students with site visits mandatory and integral to the design process. When feasible, "clients" are involved in the process so students do not work in a complete theoretical vacuum. Sharing studio facilities and support courses with students in the Interior Design, Landscape Architecture, Construction Management, Historic Preservation, and other degree programs, our students are exposed to the collaborative roles and responsibilities of related disciplines on a regular basis. As in the B.Arch. program, many M.Arch. courses will be taught by adjunct faculty holding full-time positions in firms; they bring current experience to the classroom/studio, serve as role models to students in ways full-time faculty cannot, and often facilitate students in their search for internships or other employment. Professional management courses are also taught by adjunct faculty with full-time positions

at respected local firms (Kieran Timberlake and Vitetta Architects/Engineers, for example) provide in-depth information about the complexities of architectural practice.

Architecture students routinely interact with professionals besides their instructors, whether through the fall and spring lecture series – which strive to present a spectrum of viewpoints about contemporary practice – or through the many jurors who participate in mid-term and final critiques semester after semester. These are among the advantages of studying architecture in a large city, and also a city within easy reach of New York and Washington, DC. Students have also come to know local architects through events such as internships, the annual multi-university exhibition of student work at the local AIA headquarters, and the annual BIG EVENT Benefit hosted by the Associate Committee of the American Institute of Architects, Philadelphia Chapter and the AIA Philadelphia Young Architects Forum. Our student chapter of the AIAS has found multiple ways to introduce themselves and their classmates to the profession though firm visits, conferences, architectural tours, and other AIAS activities at the local, regional, and national level.

In addition, a cohort of young alumni now practicing in the region regularly attends critiques where they meet and begin forming mentorships with students. One indication of the program's success in this regard was alumna Karen Blanchard, AIA (B.Arch. 1998, now an architect with Wallace, Roberts & Todd) being the recipient of the 2010 AIA Philadelphia Young Architect Award.

Annual presentations by NCARB representatives have been well attended and provide students with a good overview of the professional concerns of students and young alumni. Faculty encourage students to enroll in the Intern Development Program (IDP) at an appropriate time. Professor Carol Hermann, AIA, is a full-time faculty member and registered architect who serves as our Architecture Licensing Advisor and remains active in the Philadelphia AIA chapter. She has served as a moderator at AIA Philadelphia panel discussions and events, and is instrumental in getting our students to attend these events.

Also see **SECTION 2: 2.1 Human Resources and HR Development: Resources to Support Student Learning.**

**STEWARDSHIP OF THE ENVIRONMENT**

At Philadelphia University, M.Arch. students will be regularly exposed to issues of sustainability. There will be a strong focus on the environmental effects of the construction industry in all of their coursework. In 1995, Professor Rob Fleming began teaching full time at Philadelphia University and was charged with the design, development and teaching of courses that focused on computer aided design, multimedia design and sustainable design. As "sustainability" began to gain formal traction in architectural pedagogy, Professor Fleming was motivated to develop and found the Master of Science in Sustainable Design Program, an interdisciplinary degree program fostering collaboration, integrated design and creative exploration as the cornerstone of successful sustainable design practice. In a move to strengthen the design programs, sustainable practices are now the underpinning of all early undergraduate design studios as well as the foundation of all of the graduate programs. In addition, every technology course further reinforces a sustainable design approach to building. As stated above, it is the intention of CABE to make sustainable design principles second nature to all students. With the Sustainable Design Studio and co-requisite Landscape Ecology Seminar acting as stepping stones to the M.Arch. advanced studio sequence (MARCH -614 Design 5, Tectonics; MARCH-615 Design 5, Comprehensive; and MARCH-616, Thesis), students in the program will be well equipped to incorporate environmental stewardship as a fundamental architectural and urban design principle. Some of the core values of the Sustainable Design program are:

*Transdisciplinary Learning:* The curriculum reflects the range of skill sets needed to attack the complexity and interconnectedness of sustainability projects. Our diverse faculty also reflect this interdisciplinary environment and have backgrounds ranging from architecture to engineering to design to construction management.

*Equity and Diversity:* The program seeks to build an equitable learning environment, one that acknowledges that there is no "norm," no "cultural fabric" to "fit into" but rather a diverse learning

environment that encourages students to find comfort in being different. Students are free to pursue their full potential as individuals ready to transcend traditional ethnic/cultural borders.

*Integrated Design Education:* The Program challenges the status quo of standard design and engineering education, by immediately introducing students to experts, design options and creativity through the integrated design process. Open source learning is encouraged and "ownership" of ideas is downplayed so collective solutions to complex sustainability problems can be the focus.

*Design/Quantify/Build:* The program features hands-on, active learning by challenging students to design, quantify and build their ideas.

*Activism and Leadership:* Today, the world is searching for people who can demonstrate leadership, people who can initiate and maintain projects that will positively impact the world. Sustainability requires action, but not without a context of purpose. Activism can be a powerful tool when applied to grassroots movements. Students in the MSSD Program can use their thesis project as a springboard for future career based initiatives.

*Enterprise and Entrepreneurship:* The Program focuses itself on teaching the importance of relevant creativity, applied engineering and economic feasibility. Students are prompted to think as sustainability professionals must, and are required to consider the realities of prevalent economic structures as a basis to for building a new green economy focused on the environment, equity and enterprise.

*A Center of Green Activity:* The program is taught in a dynamic environment that is deeply connected to the green community. Students routinely find opportunities for internship, volunteer activities and job placement.

CABE's Landscape Architecture Program has a mission of sustainable urban design through service-learning. The program is committed to providing leadership in confronting ecological issues of the natural environment and cultural and social issues that affect urban neighborhoods, particularly those in need of revitalization. Landscape Architecture Design 7 Studio has recently collaborated with the ARCH-312 Design 6 (MARCH-Design 4) on the ACSA Steel Design Competition as well as with several ARCH-507 Design 9 studio projects.

The Landscape Architecture Program consistently partners with community groups, schools, or governmental organizations to address "real" environmental and community issues. Recently, in a collaborative event for Design Philadelphia sponsored by CABE and Stantec Architects, "Sustainability is More Than A Buzzword" a roundtable panel discussed sustainable design as a constant evolution of innovative ideas regardless of the discipline. Panelists included: Steve Benz, PE, LEED Fellow, Hon. ASLA of Olin Partnership; Tim McDonald, RA, CPHC of Onion Flats; Kelly Thayer AIA, LEED AP BD+C of Stantec; and Michael Pavelsky , AIA, LEED AP BD+C of the Sheward Partnership. President of Philadelphia University, Stephen Spinelli moderated the event.

**COMMUNITY AND SOCIAL RESPONSIBILITY**

The complex intersection of design studios, support courses in history/theory, technology, and professional management, elective courses, and extra-curricular activities will expose each student to the important issue of engaged citizenship while providing space to allow them to emerge from the Program with different experiences. Issues related to community and social responsibility run through the M.Arch curriculum and can be found in several courses beyond the architectural studio (Sustainable Design Studio, Sustainable Design Methods, Architecture History 1-4, and Professional Management).

Historically the Philadelphia University architectural community has engaged with the larger community on a regular basis and it is likely that M.Arch. students will continue this tradition. In the past, students have designed proposals and volunteered hours as workers for Habitat for Humanity, produced schematic designs for homeless shelters planned by the Archdiocese of Philadelphia's Project H.O.M.E., participated in the University Day of Service annual event, providing students the chance to scrape and repaint nearby structures at Historic Rittenhouse Town, a National Historic Landmark; cleaned and repaired local parks and spearheaded other projects for financially-strapped neighbors.

Two faculty worked with staff from the Academy of Natural Sciences in Philadelphia leading to two separate opportunities (studio and seminar) for students in the *Outside In* exhibit, an under-funded and over-looked children's exhibit at the Academy of Natural Sciences. The students provided innovative renovation designs and, to satisfy a short-term goal, one group of students helped renovate the exhibit. Addressing the client's long-term goal, another group developed design strategies for activities and exhibits that engage principles of sustainability and inquiry-based learning.

A section of fifth-year studio undertook an International Homeless Assistance Center Competition, proposing solutions throughout Philadelphia. They were advised by representatives from the City of Philadelphia Support Services, Project H.O.M.E., and the Archdiocese of Philadelphia's Homeless Services and Office of Community Development (HSOCD). Three students branched off and worked directly with HSOCD and Inner City Missions, a disadvantaged women's housing organization, focusing on actual development schemes for a blighted block. They proposed homeless services, housing for Inner City and two other social welfare organizations. These schemes are now being used by HSOCD and Inner City for fundraising, project marketing, and negotiations with City of Philadelphia to acquire and develop the blighted area.

Outside the curriculum, one year the chapter of Freedom By Design built ramps for the home of a disabled young man. *Architect* magazine (December 2009 issue) included a feature on this intervention. Students involved in such efforts, for example in the Haiti prototype shelter studio, gave freely of their time to build the structure (and to document the process) and a subgroup was active in getting the University's Public Relations team to publicize the humanitarian crisis.

Currently in development, is a CABE urban-centric "think tank" or "urban-lab" that fosters inclusive design centered on communities and their social, economic, aesthetic, and ecological well-being. This lab will unite students, faculty and stakeholders in collective action to empower communities locally and globally from the micro to macro scale. By selecting strategic, high-impact areas of study in order to meaningfully contribute to the social development, knowledge, theory, practice and policy of communities in need, the lab will serve as a knowledge and networking hub for collaborative partnerships to facilitate projects. This lab will be multidisciplinary including all graduate and undergraduate disciplines in the College of Architecture and Built Environment.

This effort would formalize initiatives that architecture and her sister programs have taken on over the last ten years. A partial list of projects undertaken in the last five years:

- Doctor's Housing, Malamulo, Malawi (Design 9, Harnish)
- Germantown Framework Eco-district for GUCDC (Design 9 interdisciplinary, Douglas, Meninato)
- Costa Rica Guanacasta National Park, bamboo structures (Design 10, Plata)
- Single Bullet Exhibit for the Arlen Spector Archive (Design 7, Kratzer)
- Food Oases: Methods for bringing food access to urban food deserts (Design 5)
- Collaborative Habitat: Design Considerations for Habitat for Humanity Philadelphia
- Emerging Urbanism: Design in the Global Context (Design 9 & 10, Harnish)
- Re-envisioning the Culture Center: Designing the Historic eNtokozweni Community Centre, Johannesburg, South Africa. (Summer Traveling Studio, Harnish)
- Urban Retrofit: Re-purposing Historic Philadelphia Public School Buildings
- Project Home: Women's Shelter Design (Design 10, Kratzer)
- Patch Adams Clinic (Design 8, Kratzer)
- Academy of Natural Sciences: *Outside In* (children's exhibit), (Ecology and Making Seminar/ Design 9 community service, Frosten)
- Freedom By Design (co-curricular)
- Haiti Shelters for Post –earthquake disaster relief

Over 55 projects have been design or built since 2004.

## HOW THE PERSPECTIVES INFORM ADDITIONAL RESOURCES TO SUPPORT STUDENT LEARNING

### *Collaboration, Leadership and Professional Opportunities*

*Professional Societies and Honor Societies*
In fall 2010, the Alpha Lambda Delta national honorary society was inaugurated at the University with 140 students, including Architecture majors. The mission of Alpha Lambda Delta is to encourage superior academic achievement, to promote intelligent living and a high standard of learning, and to assist students in recognizing and developing meaningful goals in society.

Our chapter of the American Institute for Architecture Students (AIAS) organizes a variety of events for students annually, including tours to significant works of architecture (Fallingwater, New York City's Highline, the Kimmel Center), tours of local architects' offices, portfolio reviews, design contests, and other activities. Most significantly, the AIAS leadership spearheaded the recent effort to revise CABE's Studio Culture Policy. AIAS members have routinely attended and have played an important role in Northeast Quad Conference, the National Grassroots Leadership Conference, and other gatherings. Freedom By Design has had a chapter on campus since 2007. The highlight of this period was a project in which students designed and built ramps for the home of a wheelchair-bound young man. Students were mentored by internationally known architect Michael Graves, and *Architect* magazine published an article about the effort in December 2009. CABE provides support for AIAS/FBD students to attend the AIAS Forum, Quad and Leadership Conferences.

CABE also supports a student chapter of NOMA (National Organization Of Minority Architects or NOMAS), as well as the Global Architecture Brigade.

### *Community, Social Responsibility, Collaboration, and Leadership*

*Extra-curricular Opportunities*
The International Scholars Program (ISP) is a collaborative effort to increase the participation of students from moderate- to low-income families in international study. Programs have been to Brazil and Turkey and Tunisia. Of 47 eligible PhilaU students, 26 followed this experience by studying abroad for a full semester.

The Student Development Office has submitted a grant to Campus Compact, a national coalition of more than 1,100 college and university presidents committed to fulfilling the civic purposes of higher education. Dedicated solely to campus-based civic engagement, it promotes public and community service that develops students' leadership and citizenship skills, helps campuses forge effective community partnerships, and provides resources and training for faculty seeking to integrate civic and community-based learning into the curriculum (see www.campuscompact.org). The grant is to support a program that retrofits houses in the nearby Germantown neighborhood to enhance energy efficiency.

Specific events, such as the annual Unity Week, also build a strong sense of community. Unity Week is a campus-wide effort that affirms the diversity represented within the University community and the value and vitality of pluralism to our experience. Committed students, faculty, and administrators coordinate a series of performances, speakers, dialogues, open classes, food, and musical events. During two weeks each spring, between 1,000 and 1,400 students engage in discussions and culturally relevant events. The Unity Week format connects to other themed monthly programming, including Black History, Hispanic Heritage, Women's History, and GLBT history, all within a broader context of social justice.

### Design, Collaboration, and Resources to Support Student Learning

*Field Trips and Off-Campus Learning*
Aside from using Philadelphia and its surroundings as a petri dish, students are encouraged to research and explore some of the other cities and landscapes in the Northeast. Philadelphia's proximity to New

York, Washington DC, Boston, and Baltimore facilitates easy access to different urban conditions. The College sponsors numerous off-campus studio-related trips to these cities. Reaching beyond the Northeast corridor to build relationships with architecture programs in cities that offer a different geography and culture, such as Miami or Houston, is being developed for the second year within the M.Arch. program. Also, having established a formal relationship with Aalto University in Finland will in the near future provide students with an accountable and translatable international academic experience. Students may also participate in trips organized through various University-affiliated organizations – some are voluntary trips sponsored by student groups, others are required by professors for a particular course.

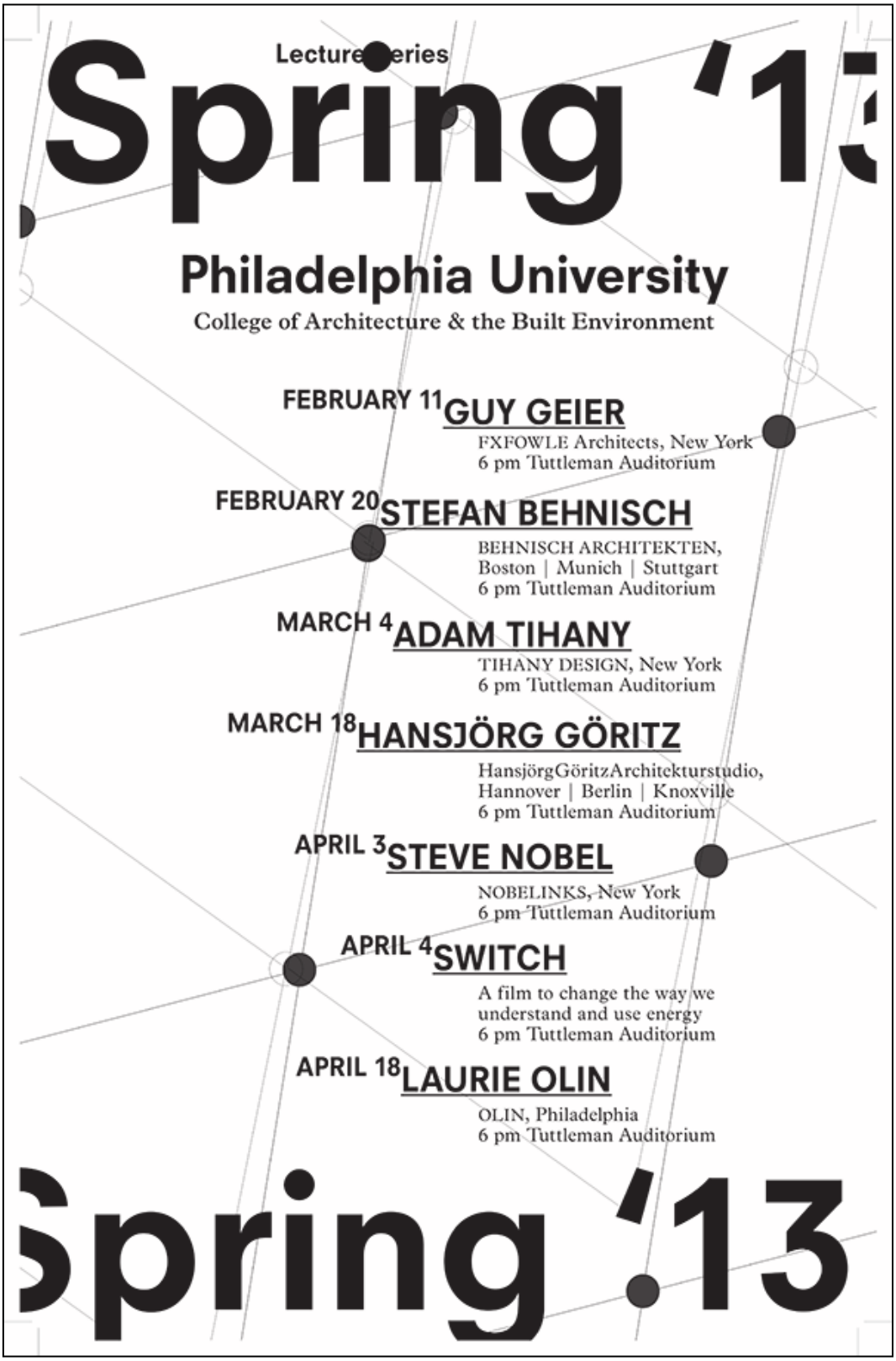
*Visiting Lecturers and Critics*
The College of Architecture and the Built Environment has maintained an annual spring lecture series; in addition to the spring lecture program, a permanent fall series is being inaugurated in 2016. Since its inception, the lecturers have been prominent design professionals; however, recent lecture series have expanded to include those working in less conventional settings, such as NGO's. The Architecture Program has also organized an annual fall lecture series, primarily based on technology.

*Visiting Critics*
Each semester studio faculty invite guest jurors for mid-term and final reviews. Generally, jurors comprise architects and designers from the Philadelphia region including New York, Baltimore, and Washington D.C

*Annual Lecture Series*
Generally, CABE lectures take place on Monday evenings at the beginning of design studio. All upper level studios (including M.Arch D4, D5, and D6) are scheduled at the same time—this eliminates conflict with other courses and allows students the opportunity to attend every lecture.

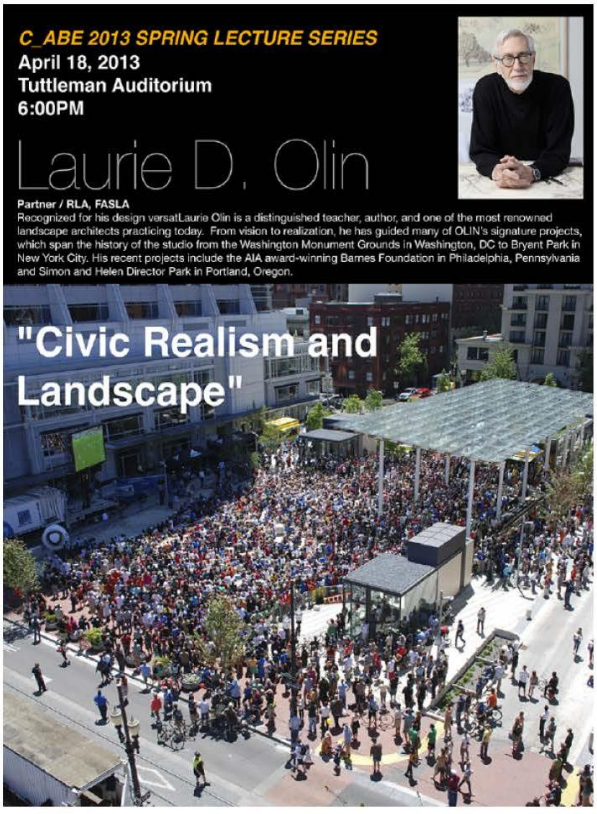
Past lecturers include:

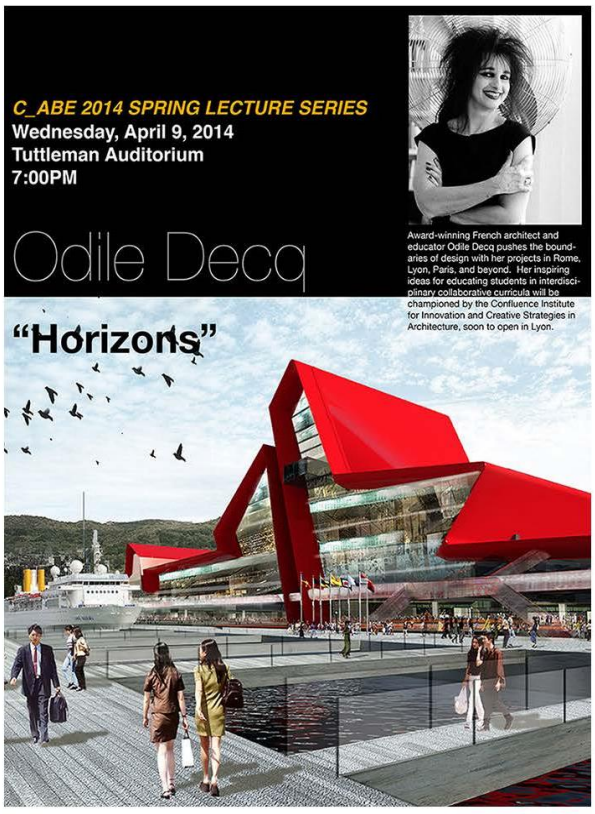
- Jaime Lerner, former president of International Union of Architects
- Thom Mayne, FAIA
- Lars Spuybroek, NOX, Rotterdam, and Prof. Digital Design, University of Kassel.
- Laurie D. Olin, FASLA, Olin Partnership.
- Zaha Hadid
- Antoine Predock, FAIA.
- Guy Marriage, Prof., Victoria University of Wellington, NZ; Faculty P.I. Solar Decathlon "First Light."
- Brad Cloepfil, Allied Works Architecture.
- Moshe Safdie
- William Sharples, Principal, SHoP Architects
- Billie Tsien, Tod Williams Billie Tsien Architects
- Marlon Blackwell, FAIA, Prof., University of Arkansas
- Dan Wheeler, Wheeler Kearns Architects
- Kevin Daly, Principal, Daly Genik Architecture
- Peter Eisenman and Michael Graves, Architects, panel discussion
- Sebastian Mariscal, Principal, Sebastian Mariscal Studio
- Odile Decq, Studio Odile Decq
- Marie and Keith Zawiskowski, Virgina Tech, design/buildLAB




Lecture Series Poster






Lecture Posters


SEE Gallery, A+D Center

*Exhibitions*
The College of Architecture and the Built Environment has developed an exhibition program through the "SEE" initiative (Student Exhibition Environments). SEE offers Philadelphia University students, staff, and faculty an opportunity to "see" projects that are being produced by students in the College of Architecture and the Built Environment. SEE is not only a teaching tool for our design students, it is also a venue to showcase work to prospective students and their families, as well as to visiting professionals. The main SEE Gallery space centrally located in the Architecture and Design Center (A+D) has proven to be successful in this regard with a range of exhibitions showcasing the work of CABE students. The adjoining A+D Office Gallery features photographs, drawings, and models by CABE faculty as well as by other architects, designers, and photographers. Exhibitions generally run 3-6 months.

Recent past and current exhibitions:

- *Simulations:* A New Building for the College of Architecture and the Built Environment
  Selected Design 9 for Architecture Studio Projects
- *Intercurrences:* Intervening Design Strategies
  Selected Interior Design Studio Projects
- *Cross Sections 2013*: Selected Work from the College of Architecture and the Built Environment
- *The John Stewardson Memorial Scholarship in Architecture Competition:* CABE Selected Projects
- *The John Stewardson Memorial Scholarship in Architecture Competition:* Pennsylvania State Finalists
- Tough Competition: Selected Competition Work from the College of Architecture and the Built Environment
- Morna Livingston: Steps to Water
- *LIMIT_Less:* Selected 2D/3D work from CABE Senior and 5$^{th}$ year students in architecture, interior design, and landscape architecture.
- *Frank Flury:* Thinking and Doing

Future Exhibitions:

- *Detection:* Selected Work from Freshmen Design in the College of Architecture and the Built Environment
- *God is In the Detail:* The Architectural Detail in Detail [architecture, landscape architecture, and interior design]
- *4-D Prototyping:* Animated Architecture
- *Seeds:* New Sustainable Strategies from Landscape Architecture and Sustainable Design

Annually, the College participates in a joint exhibition *Degrees of Design: Student Work from Local Architecture + Design Schools*, the Philadelphia Center for Architecture's annual survey exhibition of work taking place in Philadelphia's architecture and design schools.

Since the University is located within easy access of the Philadelphia region's museums and galleries and other universities, students have many opportunities to see public exhibitions throughout the academic year, in particular when it is part of a course or when work by faculty and/or students is displayed as part of a First Friday event in Old City (the neighborhood where the majority of galleries are located).

*Annual CABE Publication: SPACEWORK*
In the Spring of 2014, twelve CABE students from architecture, landscape architecture, and interior design working in an interdisciplinary capacity, conceptualized a new type of design annual. With oversight from Prof. Donald Dunham, the editorial team of students collaboratively designed, wrote, and produced a 100+ page journal highlighting work from all of the college's graduate and undergraduate programs. The content represented students in all years of study and included interviews with faculty and graduate professionals. *Spacework* highlighted the College's programs in architecture, interior design, construction management, geodesign, landscape architecture, and sustainable design, as well as the university's nexus learning approach. *Spacework* is not an annual review highlighting the best work of the year; instead, it is a critical examination of the comprehensive CABE studio experience and the design concepts and critical thinking from various perspectives. In the Spring of 2015, another group of students working in collaboration with faculty and fellow students produced Spacework Issue No. 2. The students who envisioned *Spacework* and the faculty who support it, see the publication as a foundation for studio culture, as a touchstone for students as they journey through the entire course sequence, and as a dialogue about design and process.

*Click here to learn more about the inaugural issue of SPACEWORK:*
*http://wordpress.philau.edu/today/2014/05/21/college-of-architecture-and-the-built-environment-students-publish-new-design-journal/*

*Click here to see SPACEWORK Issue No. 2:*
*http://philau.edu/ebooks/spacework/index.html#spacework-02/page/1*

## I.1.5 Long-Range Planning

**Institution Long-Range Planning**
The Architecture Program's goals align with the University's Strategic Initiative to be "the model for professional university education in the 21st century." The University's priorities include formalizing the Nexus Learning approach (active, real world, engaged, and multidisciplinary), achieving innovation and advancing applied research, and integrating curricular and co-curricular learning. These issues are pursued at multiple levels by various University activities connected to the Architecture Program, including: an interdisciplinary research collaborative focusing on green materials, sustainable design and community outreach, the Center for Innovative Teaching and Nexus Learning, which concentrates on integrating active, collaborative and real-world learning that is infused with the liberal arts across the curriculum, thereby enhancing students' overall academic experience and preparing them for the 21st-century work world. The University's strategic plan and emphasis on Nexus learning also reinforce the Architecture Program's continued search for interdisciplinary opportunities and community partners.

**Master of Architecture and CABE Long Range Planning**
The M.Arch. program has access to resources already in place for the accredited B.Arch. program. These resources are: University and College facilities assigned to the Architecture program and set up to support an architectural education; the architecture faculty is in place and experienced; the College has implemented many new Master degree programs which will provide additional physical and intellectual resources to support the M.Arch. objectives; finally, Philadelphia University is committed to providing the resources required to develop successful master's degree programs by providing funding, space and faculty positions, and recruiting, admitting, and retaining highly motivated, academically capable degree candidates with a diversity of cultural and life experience backgrounds. Specific goals are the continued development of resources in the form of facilities, space, technology, and human resources. In addition, it is the intention to continue to aggressively market our programs, in particular the Master of Architecture. Through the efforts of the CABE Advancement Council, a group of benefactors (alums, local and regional practitioners, and industry leaders), the College has been able to successfully strategize and implement major initiatives and improvements to the College programs. These efforts are designed to support CABE's mission and core values as well as the M.Arch. program by assisting in:

- Student recruitment.
- Community-based projects that result in creative solutions to positively impact communities.
- Partnerships with industries, state and local agencies, community entities, and professional organizations for possible joint projects, grant opportunities and sponsorships.
- Helping fund new facilities and technologies (new studios, new studio furniture and computer monitors, Fall 2015/2016)
- Evaluating the program on a regular basis (a key to maintaining its currency and success). More information about assessment can be read in the following section.

In the event the M.Arch. is not successful in either candidacy, or accreditation: (1) the Program would offer the immediate opportunity to enrolled students to move into the B.Arch. program with advanced standing. We would also offer students an opportunity to gain advance standing in a graduate program of their choice such as the MS Architecture, MS Sustainable Design, MS Construction Management, MS GeoDesign, or MS Interior Architecture. Every attempt would be made to make it possible for the students to achieve these degrees in within an acceptable time frame. (2) We are committed to having a successful and fully accredited M. Arch. program and regardless of a setback, we would continue with the accreditation process. We would develop a strategy to evaluate our shortcomings and make the changes necessary for accreditation. We would reach out to NAAB, other successful M.Arch. program administrators and faculty to get as much critical feedback and constructive help. We would also organize a retreat that involved experienced NAAB accreditation team members, other M.Arch. program administrators, and our own faculty and University administrators to examine our process and to develop a positive working path forward. That being said, we will be working closely with NAAB and our own assessment structure to insure accreditation success.

## I.1.6 Assessment

**Program Self-Assessment**

INSTITUTION WIDE
Each year, the Program Director is required to submit a Program Assessment Plan to the University that includes Program Goals (connected to Institutional Learning Outcomes), Program Learning Outcomes with the courses involved and methods of measurements, a time frame, the actual learning outcomes, and how feedback improves the course and/or curriculum. Annual updates are due to the Director of the Academic Success Center (formerly the Learning and Advising Center). The process of preparing this document illuminates how well the program is progressing toward its mission and stated objectives.

ARCHITECTURE PROGRAM
The continued improvement of the learning environment and experience is the primary focus of the

Program Director. A thorough understanding of the issues promoting or inhibiting learning is central to the development of the micro and macro curricular agenda. Furthermore, the Program Director is constantly seeking new opportunities within the Architecture Program, the University at large and the community to strengthen the learning experience.

The Program Director references the stated objectives for each program as assessment is taking place, making sure the pedagogical structure and course content support the overarching goals for the degree program.

The Master of Architecture Program learning objectives are to foster:

1. Professional skills informed by the liberal arts and sciences
2. Multidisciplinary and collaborative approaches
3. A creative synthesis between theory and practice, to inform research and guide decisions
4. An appreciation for global and local contexts, in order to interpret and value diversity
5. Ethically responsible citizens
6. Sustainable professional practice
7. The Learning Outcomes are:

    - Address social and cultural issues through informed design solutions.
    - Research, analyze, and compare design options in a global environment.
    - Function collaboratively to connect beyond the expertise of architects.
    - Organize and direct heterogeneous teams.
    - Demonstrate the ability to apply design history and theory, sustainable practices, and technology in design projects.
    - Demonstrate familiarity of diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns of different cultures and individuals.
    - Exhibit the implication of this familiarity on the role and responsibilities of the architect.
    - Demonstrate an understanding of the sustainable practice of building.
    - Integrate professional practice with issues of public health, safety, and welfare regulations.
    - Demonstrate an understanding of working with clients and consultants, and integrating community service.
    - Exhibit an awareness of structural, environmental, and other building systems that support a healthy environment.
    - Demonstrate familiarity with current research and best practices.

In addition, Graduates of the Master of Architecture program will:

- Have demonstrated the CABE core values of collaboration, innovation, and sustainability.
- Have applied and demonstrated an integrated design process that synthesizes ecological and social responsibility, cultural significance and design excellence, and economic viability.
- Have applied and demonstrated innovative technologies into the planning and design process such as: Building Information Modeling (BIM), GIS/advanced spatial modeling, and Integrated Project Delivery (IPD).
- Have demonstrated applied research to expand the knowledge of the discipline.
- Have demonstrated professional presentation and communication skills
- Have participated in service-learning projects resulting in strategies and creative solutions that lead to positive impacts on communities.
- Have pursued partnerships with industries, state and local agencies, community entities, and professional organizations in joint projects, small grant opportunities, and sponsorships.
- Have demonstrated the integration of knowledge, analysis and research through the final thesis project.

**Assessment of Student Outcomes**
Scoring rubrics are used in all architecture studio courses or in courses where performance expectations may not be explicitly or easily understood by students (see: **SECTION 3, II.1.1 Student Performance Criteria, Methods for Assessing Student Work** for an example of a scoring rubric).The primary group for assessing program performance is the full-time faculty, which is done through the continued assessment of student learning.

**Student Input**
The University conducts a variety of student surveys and participates in both the National Survey of Student Engagement (NSSE) and the Noel-Levitz Satisfaction-Priorities Survey (see http://www.philau.edu/ir/). An assessment plan for evaluating student learning in all academic programs and administrative units has been instituted, using a Dashboard Analytics data reporting system which provides a scorecard for comprehensive assessment of effectiveness, identifies areas of targeted intervention, and allows units to align more easily with institutional goals and processes. The data is carefully considered and integrated into the planning process at all levels of the institution.

There are at least three other avenues for student input: All full-time faculty serve as academic advisors to Architecture students, which provides an opportunity for students to share their concerns or ideas regarding the courses they have taken or are taking. All courses have faculty coordinators and students are informed that they should bring any concerns to the coordinator if they do not feel that speaking to their own instructor would be appropriate or effective. Finally, at the beginning of the semester, the Program Director arranges meetings with students to disseminate general information and upcoming events, as well as to encourage the students to make recommendations about their education at that moment or at a later time. Students take advantage of this opportunity to make recommendations for improving the curriculum, the facilities, and/or policies that impact them on a regular basis.

**External Assessment**
The formal institutes in place for accrediting the degree programs at Philadelphia University are the National Architecture Accreditation Board, and Middle States Commission of Higher Education which has its own assessment priorities and reporting structure. All suggestions and recommendations made by both accrediting intuitions provide insight into the successes and weaknesses of the program, and any changes suggested or required will be overseen and implemented by the Architecture Program Director and M.Arch. Associate Director in a timely manner.

In addition to NAAB and Middle States, professionals in the greater north east region visit the campus regularly to sit on student review juries. Their direct comments to the students during the studio review and to the faculty after the review provides insight into how well the course achieved its micro stated objectives, how well it compares to other degree programs the reviewers are familiar with, and how well the course prepared students for a professional career in the field of Architecture.

Students also enter the annual John Stewardson Memorial Competition, a Pennsylvania-wide competition in which students learn the project program ten days before beginning a week long solo charrette. The competition is open to graduating students and alumni from the Commonwealth of Pennsylvania's accredited college architecture programs. Students and alumni from Carnegie Mellon University, Drexel University, Marywood University, Pennsylvania State University, Temple University, and the University of Pennsylvania participate in the competition which makes the granting of awards a marker for how well students measure against other academic programs. In addition to competitions, students participate in both internal and external exhibitions.

## I.1.6.B. Curricular Assessment and Development

**Curricular Assessment and Development**
Faculty will develop and modify syllabi and judge student work according to the slated learning outcomes in every course. Similar to the B.Arch. program, this will occur on a frequent schedule individually, and on a more structured schedule as a program. Having NAAB visit our B.Arch. program every six years has encouraged us to develop an assessment plan that has short-term and long-term cycles. Each semester or each year, faculty coordinating a course visit multiple sections (for example, during a project critique or a typical lecture), evaluate the effectiveness of the course against stated student performance criteria, collect suitable examples of student work (exams, assignments, design projects, etc), and meet with all faculty assigned to teach the course in order to collect their observations as well as to disseminate improvements for the coming semester. Since the full-time faculty meet twice per month (one College faculty meeting and one Architecture Program meeting), there are multiple opportunities to discuss curricular issues as a group each academic year. The College Assessment Advocate also assists faculty in developing comprehensive rubrics for their courses; consequently, more consistent metrics have been established to provide greater accuracy in course and program assessment.

Every three years full-time faculty meet formally to discuss the B.Arch. curriculum (the M.Arch will be integral in this discussion) as a whole and how each course fits into the overall matrix, consequently the program is able to stay ahead of any significant problems that could develop as well as responding to changing ideas and technologies.

Initially, the Master of Architecture Program will have a one-year assessment cycle with a three-year assessment cycle following the first program accreditation. Should the Program Director determine that particular courses or the overall pedagogical approach must adapt to achieve the stated objectives of the program, all necessary changes will be made in a timely manner according to the existing conditions within the architecture programs.

Currently, full-time B.Arch. faculty members coordinate different parts of the curriculum. They routinely observe student work (design work during reviews or other assignments, such as case studies or exams) and consult with all faculty (full and part-time) teaching courses under their supervision. This results in observations that are helpful for Middle States and NAAB accreditation as well as the archiving of student work for NAAB. Since the group of full-time faculty is relatively small, faculty are able to discuss the progress in the courses informally as well as during the scheduled monthly Architecture Program faculty meetings (these meetings include all Architecture Program Faculty). Once every three years, a more comprehensive evaluation takes place, and that experience is described below.

The Program's curricular review process has been directed by the Program Director. For the last major effort, full-time faculty were divided into sub-committees focused on the different sequences of the curriculum: studio, visualization, history/theory, technology and structures, and professional management. Sub-committees evaluated the relevant data (syllabi, assignments, examples from other institutions, relevant publications, etc), debated possible improvements, and then reported their recommendations to the entire full-time faculty. The Program Director integrated all the recommendations and organized a series of discussions at which time the full-time faculty agreed on a proposal. According to University procedures, that proposal was submitted to the College Curriculum Committee, which is composed of full-time faculty from across the College. The committee approved the proposal, which triggered the necessity to receive approvals from various stakeholders across campus, including directors of writing, information literacy, and information technology. The College Curriculum Committee chair presented the proposal to the University Curriculum Committee, composed of full-time faculty from across the institution as well as ad-hoc members from administrative positions. Although the University governance structure has since been revised, all future curricular reviews and revisions will follow a similar process.

Assessment of changes occurs after a new course or significantly altered course has been offered, peer evaluations completed and student evaluations tabulated. Possible improvements can be identified and the cycle can begin again immediately.

The following chart represents a five-year M.Arch assessment plan (this is based on the Middle States 5-year assessment cycle). Benchmark courses were selected to help identify program strengths as well as weaknesses. It is the intention to cross-reference with a similar B.Arch assessment map for all cross-listed courses.

**Master of Architecture Curriculum Assessment Map 2015-2020**

**I** = Introducing
**D** = Developing
**M** = Mastering
**A** = Assessment

Information Literacy goals should be noted with (IL)

Nexus Learning Goals with (NL)

Writing Enriched with (WE)

| Institutional Learning Outcome | Program Goals: A-F<br>Program Learning Outcomes: 1-12 | INTRODUCTION TO DESIGN<br>MARCH-601 | INTRODUCTION TO VISUALIZATION<br>MARCH-602 | DESIGN 1<br>MARCH-611 | DESIGN 2<br>MARCH-612 | HIST 1: BLT ENV, ANC TO MED<br>MARCH-631 | TECH 1: MATLS + METHODS<br>MARCH-641 | VIS 1: DIGITAL MODELING<br>MARCH-621 | HIST 2: REN / BAROQUE<br>MARCH-632 | TECH 2: SYSTEMS + ENV<br>MARCH-642 | STRUCTURES 1<br>MARCH-651 | SUSTAINABLE DESIGN STUDIO 1<br>SDN-621 | LANDSCAPE ECOLOGY<br>SDN-623 | HIST 3: EARLY MODERN<br>MARCH-633 | TECH 3: DYNAMIC SYSTEMS<br>MARCH-643 | STRUCTURES 2<br>MARCH-652 | DESIGN 4: TECTONICS<br>MARCH-614 | HIST 4: MODERN / CONTEMP<br>MARCH-634 | TECH 4: ADV BLDG ANALYSIS<br>MARCH-644 | VIS 2: ADVANCED MODELING<br>MARCH-622 | DESIGN 5: COMPREHENSIVE<br>MARCH-615 | TECH 5: DOC + DETAILING<br>MARCH-645 | RESEARCH METHODS<br>MSARCH-631 | DESIGN 6: THESIS+<br>MARCH-616 | PROFESSIONAL MANAGEMENT<br>MARCH-661 | Time Frame for Assessment | Measures + Targets (what specific instruments are used to measure outcome? Do you have direct and indirect measures?) What are your specific targets? (70% of students will achieve an "average" grade on the rubric or better) | Actual Learning Results (what did your assessment reveal? How did you compare to your targets?) | Feedback into unit (changes implemented or planned as a result of the assessment results |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I. Prof. skills informed by liberal arts + sciences | **A.** Integrate knowledge of liberal arts + sciences with design of the built environment. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1. Address social and cultural issues through informed design solutions. | | | D/A | | I | | | D | | | | | D | | | | D | | | | | | | | M/A | | **2015-16: [D]** MARCH-611<br>**2019-20 [M]** MARCH-616 | **MARCH-611, 616**: Research projects, including case studies, presented in oral and written/graphic forms to invited jurors and graded (by some faculty) with a rubric. **MARCH-611**, 30% excellent-above average, 60% average, 10% below average-unacceptable. **MARCH-616** 60% excellent-above average, 40% average. 0% below average-unacceptable. | | |
| | 2. Research, analyze, and compare design options in a global environment. | | | D/A | | I | | | D | | | | | D | | | | D | D | | | | | | | M/A | | **2015-16: [D]** MARCH-611<br>**2019-20: [M]** MARCH-616 | | | |
| II. Multidisc. + collaboration | **B.** Appreciate the value of collaboration, including multidisciplinary collaboration, in solving design problems. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3. Function collaboratively to connect beyond the expertise of architects. | I | | | | | D | | | | | | | | | | D/A | | | | | M/A | | | | | | **2016-17: [D]** MARCH-614<br>**2018-19: [M]** MARCH-615 | **MARCH-614, 615**: Case studies and Design projects, presented to jurors and graded with a rubric. **MARCH-614**,30% excellent-above average, 60% average, 10% below average-unacceptable. **MARCH-615**, 65% excellent-above average, 35% average, 0% below average-unacceptable. | | |
| | 4. Multi-disciplinary. | I | | D | | | D | | | | | | | | | | D/A | | | | | M/A | | | | | | **2016-17: [D]** MARCH-614<br>**2018-19: [M]** MARCH-615 | | | |
| III. Integrate theory + practice | **C.** Synthesize theory, function, technology, and aesthetics in an integrated and creative way. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5. Demonstrate ability to apply design history and theory, sustainable practices, and technology in design projects. | | | | | I | I | | I | I | I | D | | D/A | D | D | D | D | D | D | M | M | | | M/A | | **2015-16: [D]** MARCH-633<br>**2019-20: [M]** MARCH-616 | **MARCH-633:** Case study assignments, graded with a rubric. 85% excellent-average,15% below average-unacceptable. **MARCH-616:** Case studies and Design projects, presented to jurors and graded with a rubric. 60% excellent- average, 40% average, 0% below average-unacceptable. | | |
| IV. Interpret + value diversity | **D.** Understand and respect the people, places, and contexts that bear upon the built environment around the world. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6. Demonstrate familiarity of diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns of different cultures and individuals. | | | | | I | | | I | | | D | | | | | | D/A | | | | M | | | M/A | | **2017-18: [D]** MARCH-634<br>**2019-20: [M]** MARCH-616 | **MARCH-634**: Exams and case study assignments, graded with rubrics. 85% excellent- average, 5% unacceptable. **MARCH-616:** Research project, written report orally presented to jurors, graded with a rubric. 60% excellent-above average 40% average, 0% less than average-unacceptable. | | |
| | 7. Exhibit the implication of this familiarity on the role and responsibilities of the architect. | | | | | I | | | I | | | | | | | | | D/A | | | | M | | | M/A | | **2017-18: [D]** MARCH-634<br>**2019-20: [M]** MARCH-616 | | | |
| V. Ethically responsible citizens | **E.** Examine the characteristics of professionalism in architectural practice. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 8. Demonstrate sustainable practices of building. | | | | I | | I | | | | | | | | D | D | D/A | | D | | | M/A | M | | M | | **2016-17: [D]** MARCH-614<br>**2018-19: [M]** MARCH-615 | **MARCH-614**: Discussions and design projects, presented to jurors and graded with rubrics. 25% excellent-above average, 65% average, 10% less than average-unacceptable. **MARCH-615**: Discussions and design projects, presented to jurors and graded with rubrics. 60% excellent-above average, 40% average, 0% less than average. | | |
| | 9. Integrate professional practice with issues of public health, safety, and welfare regulations. | | | I | | | I | | | | I | | | | D | D | D/A | | | | | M/A | M | | M | M | **2016-17: [D]** MARCH-614<br>**2018-19: [M]** MARCH-615 | | | |
| | 10. Synthesize dealing with clients and consultants, and integrate community service. | | | | | | I | | | | | D | | | D | D | D/A | | | | | M/A | M | | M | M | **2016-17: [D]** MARCH-614<br>**2018-19: [M]** MARCH-615 | | | |
| VI. Innovation to field | **F.** Practice design as integrated process that respects existing contexts and/or inevitable transformations in the field. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 11. Exhibit awareness of structural, environmental + other building systems that support a healthy environment. | | | | | | I | | | I | I | | | | D | D | D | D | D/A | | | M/A | M | | M | | **2017-18: [D]** MARCH-644<br>**2018-19: [M]** MARCH-615 | **MARCH-644**: Research projects, presented orally and graphically and graded with a rubric. 35% excellent-above average, 50% average, 15% less than average-unacceptable. **MARCH-615:** Assignments, case studies, and design projects, presented orally and graphically and graded with a rubric. 60% excellent-above average, 40% average, 0% less than average-unacceptable. | | |
| | 12. Demonstrate familiarity with current research and best practices. | | | | | | I | I | | I | I | | | | D | D | D | D | D/A | D | M/A | M | | M | M | **2017-18: [D]** MARCH-644<br>**2018-19: [M]** MARCH-615 | | | |

# SECTION 2. Progress Since Previous Visit

Not Applicable

# SECTION 3. Compliance with the Conditions for Accreditation

## I.2.1 Human Resources and Human Resource Development

**Policies and Procedures Relative to EEO/AA**
Philadelphia University, an Equal Opportunity Employer (*FM*, 10.3), is committed to providing equal opportunity with respect to employment and employment-related issues, for all employees. The full policy is articulated in the *Employee Handbook*, 2.1.1.A. The University is a covered employer under the Family and Medical Leave Act of 1993 as Amended ("FMLA"); see section 2.2.7. The University strives to create a work environment where all individuals are treated fairly, with respect, and where personnel decisions are made on the bases of job qualifications and merit. It is the policy of the University to employ, train, compensate, promote, and provide other conditions of employment without discrimination due to race, color, religion, national origin, sex, age, handicap, veteran status, sexual orientation, or other classification protected by federal, state or local law. See *EH,* 2.5.1. Also see: **SECTION 4 Supplemental Material: vi. Policies and Procedures Relative to EEO/AA for Faculty, Staff, and Students** for link to the *Faculty Manual 2015* regarding specific information above and below.

**Initiatives for Diversity**
As stated in the *Employee Handbook*, 2.1.1.B: "Where protected groups are under-represented among its employees, the University pledges aggressively to pursue means of remedying imbalances. The University will implement and administer this policy in accordance with all applicable federal, state and local laws and regulations." One method of doing this is the assistance Human Resources staff have given to chairs of search committees, in particular referring them to the approximately 30 website links on its Advertising Options for Diversity portion of the *Recruitment Resources for Hiring Managers* webpage.

As part of academic planning, the Provost is working with a consultant, the educational consulting firm Educational Advisory Board, to analyze the current body of the faculty, its distribution, and faculty-student ratios, recognizing the pressing need to increase and diversify the number of full-time faculty in terms of age, race, gender, ethnicity, scholarship, and expertise. The architecture program faculty are testament to the goal of increased diversity: two of the three past full-time faculty hires are minority members. Also, when recruiting part-time faculty, the program similarly seeks to increase diversity in terms of race, ethnicity, and gender.

**Human Resource Development Policy**
Increasingly, the University has been formalizing and improving its mentoring procedures for new faculty and expanding options for faculty development. New employees, including administrators and faculty, attend a series of orientation sessions that cover topics from employee benefits to managing new technologies in the classroom. Furthermore, the *Faculty Manual 2015, Employee Handbook,* and other resources are posted on the University's website for easy consultation. In the Architecture Program, new faculty are assigned a more experienced faculty mentor and typically meet with the Program Director at least once per semester to discuss progress in teaching, professional development, and service. All faculty submit a Faculty Activity Report which serves as the basis for a yearly evaluation by the Executive Dean. Due to the University's small size, more frequent meetings with the Executive Dean and/or the Program Director are common for all faculty.

The majority of architecture full-time faculty are registered architects and are thus subject to the same continuing education requirements as any professional architect. In addition, despite full-time teaching and service loads, many continue to practice architecture in some way: finding smaller projects, those that appeal to a particular niche, and/or design competitions. Faculty have access to the *Chronicle of*

*Higher Education*, professional journals and the *Journal of Architectural Education*, attend lectures on campus and at other institutions, and network at conferences. These activities update their exposure to the field and usually impact what they bring to the classroom and studio. Adjunct faculty also tend to be licensed architects and/or engineers practicing in greater Philadelphia. They largely work full-time in design offices and bring that current experience into the classroom/studio with them. Professional currency is particularly important to our programs.

**Resources Available to Faculty**

The University and Architecture Program value faculty members' professional activity and achievement, and expect faculty to bring their professional development into the classroom, as expressed in the *Faculty Manual*, 21.2.3: "It is expected that through their own curiosity and interest, faculty will continue to question, to investigate, and to use their findings in the classroom." The University offers the highest salary and best benefits package it can, given the constraints of its budget, to reward faculty achievement, foster quality education, and remain competitive with similar institutions. Tenured and practice faculty with a least seven years of full-time service, are eligible to apply for an initial sabbatical leave. Eligible faculty can apply for one of the available sabbatical leaves. Applications are reviewed by the College Personal Committee (CPC) and University personal Committee (UPC) both committees make recommendations to the Provost and President. The President makes a *de novo* decision following her/his review of the recommendations and applicants. Faculty who have been granted a sabbatical leave may request a one-semester sabbatical leave at full salary or a two-semester leave at half salary. Faculty who have been granted a Fulbright Award are eligible to receive a leave of absence from the University contingent on the leave being consistent with the objectives and needs of the College and the University. The University has funded travel to academic conferences for faculty presenting a paper; typically funds are sufficient for each faculty to take advantage of this once per academic year. New faculty have received similar funding even when they are not presenting, so as to acclimate them to the academic milieu they are entering. The University also sponsors Grants for Faculty Research, Scholarship and Design Projects, a competitive initial funding source for faculty work at its early stages. Other resources include the Center for Teaching Innovation and Nexus Learning, digital technology workshops designed and conducted for staff and faculty by the Office of Information Resources' Instructional Technology Support, as well as the Virtual Center for Instructional Technology. The University's Patent Policy is found in the *EH*, 2.5.9. With its Patent Policy, the University attempts to ensure that any inventions resulting from the research and scholarship pursued at the University are developed, disseminated, marketed and commercialized for the mutual benefit of the inventor, the University and the public."

**Full-time Faculty Appointments, Promotion, and Contracts**

To aid in the selection of candidates for faculty positions, officers of the University appoint advisory search committees, whose recommendations are not binding, but extremely helpful. When appointed by the President, subject to approval of the Board of Trustees, a new faculty's contract is one of the following three categories of full-time faculty (see *Faculty Manual*, 5):

- Tenured or tenure-track faculty members holding one of the following academic ranks: Instructor, Lecturer, Assistant Professor, Associate Professor, and Professor. Tenured and tenure-track faculty focus on teaching, professional activity and achievement in their current field, and service to the University.
- Renewable non-tenure track "Practice-track or Practice faculty" are faculty holding one of the following academic ranks: Instructor, Lecturer, Assistant Professor, Associate Professor, and Professor. They focus on teaching, professional activity and achievement in their current field, and service to the University.
- The University has two types of visiting teaching faculty: research-oriented faculty and Practice faculty. Visiting faculty are appointed to fill special, short-term teaching needs, not to exceed a maximum of five consecutive one- year full-time terms.

The new tenure-track or practice-track faculty member typically has a probationary period of three two-year contracts, for a total of six years (FM 11.10). During this time, the Program Director observes her/his

teaching and provides mentorship in all areas of faculty responsibilities. A formal review occurs of the faculty's application for a contract renewal during the year before a new contract is scheduled to begin (in other words, during the second and fourth years); the College Personnel Committee considers the Program Director's recommendation letter, peer evaluations and vote by the College senior faculty, student evaluations, and a portfolio of course materials and professional and service accomplishments before passing along a recommendation to the Executive Dean. Subsequently the chair of the College committee and the Executive Dean present the candidate's application materials to the Provost who subsequently makes a positive or negative recommendation to the President. The President notifies each candidate of the final decision. During the 6th-year dossier review, an additional step of soliciting appropriate assessors from outside the University is added. The University Personnel Committee may award tenure to tenure-track faculty and a five-year contract to practice-track faculty. During the last year of a five-year contract, practice-faculty are eligible to apply for a seven-year contract (and all subsequent contracts would be also for seven years).

Criteria for new contracts, including tenure, and promotions are established by the *Faculty Manual*. The most significant factors measuring the excellence of a faculty member are judged to be:

- Academic attainment as measured by degrees earned, with faculty having earned the appropriate terminal degree in the professional field and those appointed to tenure typically having earned the highest degree in their field of competence.
- Experience relevant to the member's responsibilities.
- Consistently high performance in teaching.
- Professional achievement and continuing growth in the faculty member's field of specialization, including research and publication; presentation of papers at professional or industrial meetings; leadership in professional organizations; consulting; other concrete contributions to one's profession; for design faculty, published research and juried exhibits demonstrating original contributions to the field.
- Contributions to the University, showing a continuing commitment to maintain and improve the intellectual and creative life of the institution. These include effective participation and leadership on committees of the College and the University, program development, involvement in campus activities, and representation of the University beyond the campus.

Although the majority of criteria is similar, the *Faculty Manual* differentiates between suitable achievements for tenure-track/tenured and practice-track/practice faculty in the following ways. For professional development, the former can contribute (among other ways) via published scholarly reviews of significant areas of advancement and/or original research demonstrated by publication, while the latter can contribute (among other ways) via published professional reviews of significant areas of advancement and/or regular and sustained practice in the field and/or maintenance of licensure. (see *FM*, 21.2.3.B.)

In addition, CABE tenure-track and practice-track/practice faculty are aided by guidelines assembled by the College Personnel Committee, which was produced by CABE faculty to be used by the committees, Provost, and President as they review candidates. The guidelines parse out specific issues and examples of professional achievements in teaching, service (to the University and to one's profession), and professional development (scholarship and/or practice).

Recommendations for advancement in rank for both tenure-track/tenured and practice-track full-time faculty originate with the College Personnel Committee and advance to the University Personnel Committee and Provost; each deliberates separately. The UPC recommendations are submitted to the Provost, who in turn, submits both the CPC and UPC recommendations along with her/his own to the President. Final decisions on all tenure, promotions, 5-year and 7-year practice-track/practice contracts reside with the President. (see *FM*, 21.)

**Part-time and Short-term Faculty** (see *FM*, 9.2, 9.3):
Part-time faculty members may be on 9, 10, or 12 month contracts depending upon the curricular needs of the program. Part-time faculty are offered annual contracts, which may be renewed by the University upon the recommendation of the Executive Dean to the Provost and President. Short-term faculty are typically appointed for a single semester at a time. Contracts are dependent upon sufficient enrollments in the courses listed on the contract.

**Faculty Teaching Loads**
Ordinarily, each full-time faculty member will teach (12) workload units per semester. A workload unit is calculated by multiplying a course's contact hours by its Instructional Method Value (IMV). Contact hours are published in the University Catalog. The Faculty Compensation Policy, as amended from time to time and posted on the Provost's Office web page, contains the definition of IMV.
See: http://www.philau.edu/provost/resources/Compensation%20Policy9.3.pdf

The 2014-2015 University Catalog:
http://www.philau.edu/catalog/inc/documents/CATALOG_PDF/Catalog2015.pdf

FACULTY RESUMES, FACULTY MATRIX, and FACULTY BIOS
Following are resumes for all full-time faculty that have taught in our existing B.Arch degree program over the past four semesters (prior to visit--Fall 2013-Spring 2015). Note: only faculty who have taught in B.Arch courses currently cross-listed as M.Arch/B.Arch or other required courses are included, however, the resume also includes courses taught that would fall outside the M.Arch curriculum. For a more precise overview of all full-time and adjunct faculty who have taught in cross-listed B.Arch/M.Arch courses, see the faulty matrix by semester immediately following faculty resumes. In addition, short bios for each faculty member are included following the matrix (credentials, professional activities as well as past and projected research scholarship, and creative activities).

# Faculty Resume

**David M. Breiner, Ph.D.**

**Courses Taught**
ARCST-341 American Architecture
ARCST-410 Vernacular Architecture
ARCST-410 Vernacular Architecture
Coordinates Architecture History Courses

**Educational Credentials:**
Rome Studies Program, University of Notre Dame, 1978-79
B. Arch, University of Notre Dame, 1981
M.A., History of Architecture and Urban Development, Cornell University, 1985
Ph.D, History of Architecture + Urbanism, Cornell University, 1994

**Teaching Experience:**
Professor of Art History, Savannah College of Art & Design, 1992-1993
Assistant Professor, Philadelphia University, 1995-2001
Associate Professor, Philadelphia University, 2001-present
Interim Executive Dean, College of Architecture and the Built Environment, Philadelphia U., summer 2012
Associate Dean, School of Architecture, Philadelphia University, 2008-2010, 2013-present
Interim Director, Architecture Program, Philadelphia University, 2009-2010
Director, Architecture Program, Philadelphia University, 2010-2013

**Professional Experience:**
Architectural Designer, Madigan-Praeger Division, URS Company, New York City, 1981-1982
Architectural Designer, Martin A. DeSapio, A.I.A., Flemington, NJ, 1985
Architectural Historian, Landmarks Preservation Commission, New York City, 1987-1992, 1993-1995

**Selected Publications and Recent Research:**
"Scamozzi and the Completion of Venice's 'Roman' Face." *Constructing Identity: Proceedings of the 86th ACSA Annual Meeting & Technology Conference*. Washington, D.C.: ACSA, 1998.
"No Accidental Tourists: The Development of Roman Guidebooks for Cinquecento Architects," Annual Meeting, Society of Architectural Historians, 2000.
"George Louis Heins and Christopher Grant LaFarge." *Dictionary of Contemporary Architecture*. Milan: Allemandi Editore, 2001.
"Manhattan's Tudor City: A 1920's Urban Utopia," Annual Meeting, Society for Utopian Studies, 2003.
"Architecture." *Berkshire Encyclopedia of World History*. 5 vols. William H. McNeill, senior ed. Great Barrington, Mass.: Berkshire, 2004.
*Philadelphia University Campus Heritage Project Report*, Getty Trust's Campus Heritage Initiative, 2006.
"Building Campus on Residential Estates," Annual Meeting, Society of Architectural Historians, 2009.
*Architecture Program Report for Accreditation Review*, Philadelphia University, 2011.
"Philadelphia's School House Lane, A Place Apart," Annual Meeting, PA Historical Association, 2014.
"Philadelphia's School House Lane: Architecture and Society" (working title), forthcoming publication based on the results of the Campus Heritage Project.

**Professional Memberships:**
Society of Architectural Historians, Philadelphia Chapter, President 2000-2002
Society of Architectural Historians, National Organization
Historical Society of Pennsylvania
National Trust for Historic Preservation
Vernacular Architecture Forum
Germantown Historical Society, Board of Directors, 2003-2007

# Faculty Resume

**James Doerfler, AIA**

**Courses Taught**
ARCH-507 Design 9
MSARC-631 Architectural Research Methods
MSARC-619/ARCH-419 High Performance Building Envelopes

**Educational Credentials:**
B. A. Art History, University of Hartford, 1981
M. Arch, Syracuse University, 1985

**Teaching Experience:**
Lecturer, University of Technology, Sydney, Australia, 2002-2005
Interim Architecture Department Head, University of Technology, Sydney, Australia, 2005
Associate Professor, California Polytechnic State University, San Luis Obispo, 2005-09
Professor, California Polytechnic State University, San Luis Obispo, 2009-13
Director, Master's Programs and Professor, California Polytechnic State University, San Luis Obispo, 2011-13
Interim Head of Department and Professor, California Polytechnic State Univ., San Luis Obispo, 2012-13
Director of Architecture Programs and Professor, Philadelphia University, 2013-present

**Professional Experience:**
Project Architect, Rafael Vinoly Architects P.C. - New York, NY, 1985-1988
Project Architect, Richard Gluckman Architects - New York, NY, 1988-1993
Project Architect/Senior Architect, Peddle Thorp & Walker Architects- Sydney, NSW, 1996-1998
Project Architect, Morris Bray Architects - Sydney, NSW, 1998-2000
Principal Architect, James Doerfler Architects, San Luis Obispo, CA, 2005-2013, Sydney, NSW, 2000-2005 & New York, NY, 1989-1996

**Licenses/Registration:**
Registered Architect – New York and New South Wales, Australia

**Selected Publications and Recent Research/Practice:**
Co-Editor with Thomas Fowler, "Design Collaboratory 2007-2010, Fourth Year Interdisciplinary Architecture and Architectural Engineering Studio," AeD Press, San Luis Obispo 2010.
"America's Cup Master Plan for San Francisco, Fourth Year Architecture Studio, Summer 2009," AeD Press, San Luis Obispo, 2010.
Co-author with Kevin Dong – "The Interdisciplinary Design Studio – Understanding Collaboration," published in the proceedings of 2010 International Structures and Architecture Conference, Guimaraes, Portugal and ConnectEd 2010, Sydney.
Author with Kevin Dong – "Teaching Integrated Practice in a Cross-Disciplinary Curriculum after Two Years," Paper presented at ACSA Annual Meeting 2009, published in the proceedings of 2010 International Structures and Architecture, Guimaraes, Portugal and ConnectEd 2010, Sydney.
Author with Kevin Dong – "Teaching Integrated Practice in a Cross-Disciplinary Curriculum," Paper presented and published in the proceedings of ConnectEd 2007, International Conference on Design Education, Sydney, Australia, July 2007.

**Professional Memberships:**
American Institute of Architects
Building Technology Educators Society, Past President and Board Member
Façade Tectonics Institute, Steering Committee

# Faculty Resume

**Donald Dunham, AIA**

**Courses Taught**
ARCHDSN-210 Technology 1
ARCH-311 Design 5
ARCH-312 Design 6
ARCH-372 Architecture of Publication

**Educational Credentials:**
B.S. Architecture, University of Southern California, 1973
M. Arch, Victoria University of Wellington, NZ, 1996

**Teaching Experience:**
Instructor, Victoria University of Wellington, 1995
Adjunct Faculty, Philadelphia University, 2002-2008
Assistant Professor, Philadelphia University, 2009-present

**Professional Experience:**
Architectural Designer, Louis de Soissons Partnership, London, UK, 1973-1974; 1976-1978
Architectural Designer, Halpern & Partners, London, UK & Paris, France, 1974-1976
Planner & Project Designer, Peter Munselle Architecture, Los Angeles, CA, 1977-1980
Project Designer, EDC Architects, Los Angeles, CA, 1981-1982
Preparator, Museum of New Zealand Te Papa Tongarewa, Wellington, New Zealand, 1992-1996
Principal Preparator, The J. Paul Getty Museum, Los Angeles, CA, 1988-1992; 1996-1998
Project Manager, Archer & Buchanan Architecture, West Chester, PA, 2000-2003
Project Designer, Michael Ryan Architects, Philadelphia, PA, 2004-2005

**Licenses/Registration:**
Registered Architect – Arizona #49376

**Selected Publications and Recent Research/Practice:**
Gauer, James. "Modularity: Wing, Glesecke-Dunham Residence." In *The New American Dream: Living Well in Small Homes*. Photographs by Catherine Tighe. New York: Monacelli Press, 2004. 65-77.
West, Judy. "The Mellow Modernist." Photographs by Catherine Tighe. *Philadelphia Magazine: Home and Garden* 2 no. 1 (2004): 72-9.
"Inclusivity, Objectivity, and Perfection: The Museum as Utopian Space," International Journal of the Inclusive Museum, Common Ground Publishing, University of Illinois, 2011. Awarded the International Award for Excellence by the Journal of the Inclusive Museum.
"Death of the Transhistorical City: Re-examining Lou Kahn's Utopian Vision," *IASTE Working Paper Series*, University of California, Berkeley, 2010.
"Architecture Without Nature" in *Earth Perfect? Nature, Utopia, and the Garden,* Annette Giesecke and Naomi Jacobs, eds. Black Dog Publishing, London, 2012.
"Utopia Above the Law," interactive installation, imPerfect City, Delaware Center for the Contemporary Arts, March 2013-June 2013. Exhibit planner, speaker, and participating artist.
"Beyond the Red Curtain: Less is More Utopia," The Journal of Utopian Studies, vol. 25, no. 1, State College: Pennsylvania State University Press, April 2014.
"The Good Architect?" in *The Good Gardener? Nature, Humanity, and the Garden,* Annette Giesecke and Naomi Jacobs, eds. Artifice Books on Architecture, London, 2015.

**Professional Memberships:**
American Institute of Architects

# Faculty Resume

**Rob Fleming, RA, LEED© AP BD&C**

**Courses Taught**
Ecological Design Studio (Graduate)
Green Design Build
Thesis in Sustainable Design II (Graduate)
Thesis in Sustainable Design I (Graduate)
Sustainable Design Studio (Graduate, On-line and On-campus)
Sustainable Design Methodologies (Graduate, On-line and On-campus)

**Educational Credentials:**
B. Arch, Temple University, 1987
M. Arch, Virginia Polytechnic Institute and State University, Washington Alexandria Architecture Consortium, 1996

**Teaching Experience:**
Adjunct Professor, Philadelphia University, 1993 - 1994
Instructor, Temple University, 1994
Instructor, The Catholic University of America, 1995
Visiting Assistant Professor, Architecture Program, Philadelphia University, 1995 - 1997
Assistant Professor, Architecture Program, Philadelphia University, 1997 - 2003
Associate Professor, Architecture Program, Philadelphia University, 2003 - 2010
Founding Director, Master of Science in Sustainable Design, Philadelphia University, 2007 - Present
Associate Professor, Sustainable Design Program, Philadelphia University, 2010 – Present

**Professional Experience:**
Project Architect/Manager, Francis Cauffman Foley Hoffmann Architects, Philadelphia, PA, 1987 – 1994
Co-founder, ArchiGlyphics, Philadelphia, PA, 1996 – 2000
Integrated Design and Charrette Facilitator, 2000 - Present

**Licenses/Registration:**
Registered Architect – RA012960x

**Selected Publications and Recent Research/Practice:**
Fleming, Rob, Pastore, Chris: "The Aesthetics of Green," Proceedings, Association of Collegiate Schools of Architecture, National Conference, *New Orleans, LA, 2003.*
Fleming, Rob, "Sustainability, A Paradigm Not a Practice" *Green Careers in Building and Landscape*, Petersons, 2010.
Fleming, Rob, "A 21st Century Approach to Trans-disciplinary Sustainable Design Education," Accepted for publication, Proceedings: Association of Collegiate Schools of Architecture, National Conference, Boston, Mass, 2011.
Fleming, Rob; Justus, Victoria, Book Chapter: *Compliance, Safety and Sustainability,* Operational Guidelines for Educational Facilities: Maintenance. Alan S. Bigger, Editor-in-Chief; J. Thomas Becker, Maintenance Task Force chair, 2011.
Fleming, Rob, *Design Education for a Sustainable Future*, EarthScan/Routledge Publishers. March 8th, 2013.

**Professional Memberships:**
Green Advantage Certified (Commercial and Residential)
LEED® Accredited Professional (BD&C)

# Faculty Resume

**Matt E. Gindlesparger**

**Courses Taught**
ARCH 412 Design 8 for Architecture
ARCH 313 Technology 3: Dynamic Environmental Systems
ARCH 416 Tech 5: Documentation and Detailing

**Educational Credentials:**
B.S., Southern Illinois University, 2003
B. Arch, University of Arizona, 2008
M. Arch, University of Arizona, 2008

**Teaching Experience:**
Lecturer, University of Arizona, 2008
Studio Advisor & Project manager for UA Solar Decathlon Team, University of Arizona, 2008-2009
Capstone Engineering Team Sponsor, University of Arizona, 2009
Solar Car Team Coordinator & Capstone Engineering Team Sponsor, University of Arizona, 2010
Clinical Assistant Professor**,** CASE**,** Rensselaer Polytechnic Institute**,** 2010-present
Adjunct Faculty, Philadelphia University, 2010
Assistant Professor, 2014-present, Philadelphia University

**Professional Experience:**
Project Manager & Co-Principal Investigator, SEED[pod] 2009 Solar Decathlon Project, University of Arizona, 2008-2009
Technical Program Manager, AzRISE, University of Arizona, Arizona Research Institute for Solar Energy, 2009-present

**Licenses/Registration:**
ARE in progress

**Selected Publications and Recent Research:**
SEED[pod] Demonstration Site - led the reassembly of and continued research on the 2009 UA Solar Decathlon House. AzRISE, Arizona Research Institute for Solar Energy, 2009.
Solar powered 50kW Compressed Air Energy Storage Demonstration Site Facilitate and administer the design of 50 kW compressed air energy storage system, Arizona Research Institute for Solar Energy (ARISE), University of Arizona, 2010.
Arizona Department of Housing, Low-Income Housing Tax Credit Program – “Green/Healthy Points” Criteria, establish metrics to evaluate sustainable building criteria for low-income housing programs, ARISE, 2010.
University of Arizona Land Assessment Task Force, lead an effort to evaluate the potential of land for the placement of renewable energy resources, ARISE, 2010.
Active Modular Phytoremediation System(AMPS) Prototype, CASE | RPI**,** Oversee the fabrication of a full scale prototype for a plant based wall system that improves interior air quality and reduces energy consumption in buildings, 2010-present.
Active/Passive Building Enclosure (HPMS, SEWR): Passive Thermal Exchange Systems, CASE | RPI, Researcher and prototyper for High Performance Masonry System (HPMS) and Solar Enclosure for Water Reuse (SEWR) systems, 2010-Present.
Integrated Concentrating (IC) Solar Façade System, CASE | RPI**,** Development and testing of prototypes for a hybrid solar concentrating/daylighting façade system, 2010-Present.

# Faculty Resume

**Craig S. Griffen, RA, LEED AP**

**Courses Taught**
ARCH-213 Design 3
ARCH-214 Design 4
ARCHDSN-210 Technology 1
ARCH-212 Tech 2: Sustainable Systems

**Educational Credentials:**
B. Environmental Design, Miami University, 1984
M. Arch, Washington University, 1986

**Teaching Experience:**
Assistant Professor, Philadelphia University, 1995-2002
Associate Professor, Philadelphia University, 2002-present
Assistant Dean for Graduate Programs, Philadelphia University, 2009-2011
Associate Dean, Philadelphia University, 2010-2013

**Professional Experience:**
Job Captain, Nagle, Hartray & Associates, Chicago, IL 1986-1989
Project Architect, Perkins + Will, Chicago, IL 1990-1991
Project Manager, Paul Froncek Architects, Chicago, IL 1991-1994
Project Architect, Richard Conway Meyer Architect, Philadelphia, PA 1995-1998
Architectural Design Consultant, Craig Griffen Architect, Elkins Park, PA 1998-present

**Licenses/Registration:**
LEED Accredited Professional, 2009; BD+C Specialty 2013
Licensed Architect - State of Illinois, 1988; Commonwealth of Pennsylvania, 1997

**Selected Publications and Recent Research:**
"Teaching Construction Details with Color", Proceedings of the Building Technology Educators Symposium, University of Maryland, August 2006.
"The Ethics of Exploiting Sustainability as a Vehicle for a Return to Quality Construction" Proceedings of the ACSA Annual Meeting, Salt Lake City, Utah, March 2006.
"Flying Carpets; The Floating Roofs of Renzo Piano Building Workshop" *Proceedings of the 2008 ACSA Annual Meeting*, Houston, Texas March 2008.
"BIM as an Instructional Bridge Between Design and Technology" *Proceedings of the Building Technology Educators Society Meeting*, University of New Mexico, August 2009.
"Converting the Heathen; Teaching Green Building Project Delivery to Construction Management Students" Proceedings of the BTES Meeting, Ryerson University, Toronto, August 2011.
"Stealing from Ourselves; Derivations of the Gable Roof in Contemporary Architectural Design", Proceedings of the ACSA Annual Meeting, Miami, April 2014.
"Multiple Benefits of Teaching Second-Year Design with Cargo Containers", National Conference for the Beginning Design Student, IIT, Chicago, April 2014.
Third Hemispheric Meeting of Architecture Deans, Invited Key Panelist for topic of Distance Education, Antigua Guatemala, October 2014.
"Questioning the Role of Online Education in the Architectural Design Studio" ARCC 21015 Future of Education Conference, Chicago, April 2015.

**Professional Memberships:**
Building Technology Educators Society, 2006-present

# Faculty Resume

**Christopher J.E. Harnish**

**Courses Taught**
ARCHDSN-210 Technology 1: Materials & Methods
ARCH-314 Technology 4: Advanced Building Analysis
ARCH-306 Study Abroad South Africa
ARCH-507 Design 9 for Architecture
ARCH-508 Design 10 for Architecture

**Educational Credentials:**
B.A. in Environmental Studies and English Literature, Denison University, 1994
Denmark International Studies Program, 2001
M. Arch, University of Oregon, 2002

**Teaching Experience:**
Assistant Instructor, Africa University, 1999
Graduate Teaching Fellow, University of Oregon, 2000-2002
Assistant Professor, Philadelphia University, 2009-present

**Professional Experience:**
Consultant & Project Analyst, Center for Resourceful Building Technology, Missoula, MT, 1995-1996
Yard Manager & Systems Analyst, Resource Woodworks, Tacoma, WA, 1997-1998
Intern Architect, Wyant Architecture, Philadelphia, PA, 2003
Project Designer & Construction Administration Manager, Deborah Berke & Partners Architects, New York, NY, 2004-2007
Design Fellow: Architecture for Humanity, Dennilton, South Africa, 2007-2008
Project Lead, Youth with a Vision Children's Village, Dennilton, South Africa, 2008-10
Project Lead, Peit Patsa Community Arts Centre, Viljoenskroon, South Africa, 2011

**Licenses/Registration:**
ARE in progress
USGBC LEED-GA

**Selected Publications and Recent Research:**
2015 *Journal of Architectural Education.* Reframing the Cultural Institution in an Urban South African Township. Online edition.
2013 Social, Environmental and Economic Design Awards. *Honorable Mention.* Piet Patsa Community Arts Centre, Viljoenskroon, South Africa.
2012 Architectural Research Centers Consortium "Methods for Developing Flexible Technical Knowledge in Architectural Education"
2010 IASTE *International Association for the Study of Traditional Environments* "Utopian Compounds in a Dystopic Community: The built pursuit of utopia in Dennilton South Africa"
2007-2008 Architectural Record: In The Trenches *Architectural Blog* Writing on design, construction and experiences in South Africa. http://archrecord.construction.com/community/blogs/AFHBlog.asp

**Professional Memberships:**
Association of Collegiate Schools of Architecture – Member and 2010 Conference Attendee
Building Technology Educators Society – Member
IASTE, International Association for the Study of Traditional Environments – Member
Society of Building Science Educators – Committee Member: Scholarships and Award Committee

# Faculty Resume

**David Kratzer AIA, NCARB, LEED GA**

**Courses Taught**
ARCH-312 Design 6: Tectonic Studio (Coordinator)
ARCH-313 Technology 3: Dynamic Environmental Systems
ARCH-314 Technology 4: Advanced Building Analysis
ARCH-401 Design 7: Design-Build Studio
ARCH-502 Design 10: for Architecture

**Educational Credentials:**
B. Arch, University of North Carolina-Charlotte, 1978-1983
Foreign Study Program, Danmarks Internationale Studenterkomite, 1980-1981
M. Arch, University of Pennsylvania, 1990-1991

**Teaching Experience:**
Adjunct Assistant Professor, Temple University, 1991-1992
Visiting Assistant Professor, University of Idaho, 1992-1995
Visiting Assistant Professor, Washington State University, 1995
Assistant Professor, Philadelphia University, 1996-1998
Acting Director, Interior Design Program, Philadelphia University, 1996-1997
Assistant Professor, Dean's Appointment, Temple University, 1998-1999
Adjunct Faculty Professor, Philadelphia University, 2003-2006
Adjunct Associate Professor, Drexel University, 2008
Visiting Associate Professor, Philadelphia University, 2009-2011
Associate Professor, Philadelphia University, 2011-present

**Professional Experience:**
Intern Architect/Job Captain, Dalton Morgan Shook & Partners, Charlotte, NC 1983-1985
Architect, Odell Associates, Charlotte, NC 1985-1987
Associate/Designer/Project Manager, Morgan Adams Group, Charlotte, NC 1987-1990
Associate, Agoos/Lovera Architects, Philadelphia, PA 1999-2003
Architect & Consultant, Spearman Associates, Glenside, PA 2003-2005
Principal, BAU Architecture, Elkins Park, PA 1995-1999, 2005-present

**Licenses/Registration:**
Registered architect, NCARB, Pennsylvania, Idaho, and North Carolina, 1993-present

**Selected Publications and Recent Research:**
"The Practical as Instrument for Technological Imagination" *Journal of Architectural Education* (Cambridge: MIT Press. September 1997).
"Auto-tuning daylight with LEDs: sustainable lighting for health and wellbeing." BPR Paper 2013 ARCC/ EAAE Conference. (Charlotte, NC. 2013) Co-Authored w/ P.I. Eugenia Ellis (PI), Drexel Univ.
"Consensus Building & The Design-Build Project." BPR Paper. 2014 ACSA Fall Regional Meeting & Conference. (Nova Scotia, CN. 2014).
"Design-Build: Personal Privacy for the Homeless." BPR Paper. 102nd ACSA Annual Meeting & Conference. (Miami, FL. 2014).
"Earthship as Model for an Urban Co-op Health Clinic? – Patch Adams & Philadelphia" BPR Paper. 2014 ARCC/ EAAE International Conference. (Honolulu, Hawaii. 2014).

**Professional Memberships:**
American Institute of Architects

# Faculty Resume

**Kihong Ku, DDes, MDesS, Reg. Arch. Engineer (Korea)**

**Courses Taught**
ARCH 416 Technology 5: Documentation & Detailing
ARCH 507 Design 9 for Architecture
ARCH 508 Design 10 for Architecture

**Educational Credentials:**
B.S. Eng. (Architecture), Seoul National University, Korea, 1992
M.S. Eng. (Architecture), Seoul National University, Korea, 1994
Master in Design Studies, Harvard University Graduate School of Design, 2002
Doctor of Design, Design Technology & Management, Harvard Graduate School of Design, 2005

**Teaching Experience:**
Graduate Teaching Assistant, Graduate School of Design, Harvard University, 2001-2002
Graduate Research Assistant, Center for Design Informatics, Harvard University, 2002-2004
Teaching Fellow, Graduate School of Design, Harvard University, 2003-2004
Assistant Professor, Virginia Polytechnic Institute & State University, 2005-2011
Assistant Professor, Philadelphia University, 2011-present

**Professional Experience:**
Architectural Engineer & Designer, Hyundai Engineering & Construction, Co., Ltd., Korea, 1994-2000
Design Manager, HanmiParsons, Co., Ltd., Korea, 2000-2001

**Licenses/Registration:**
Registered Architectural Engineer (1st Grade), Korea, 1993 (Certificate No. 93204010839G)

**Selected Publications and Recent Research/Practice:**
Ku, K., Frosten, S., and Grinham, J. (2014), An Open-Source Paradigm in the Responsive Architecture Studio, ACSA International Conference, June 21-23, 2014, Seoul, Korea (forthcoming).
Ku, K. (2014), Design risk management practices and assessment tools for safety in construction: Opportunities for BIM, CIB W099, June 2-3, 2014, Lund, Sweden.
Ku, K. (2013). Comparing safety in design approaches and tools in the US, UK, and Australia, CIB World Building Congress 2013, May 5-9, 2013, Brisbane, Australia
Ku, K., Broadstone, P., and Colonna, A. (2012). Towards On-Site Fabrication: A Case Study on Multi-Trade Prefabrication, Offsite Theory and Practice of Architectural Production, 2012 ACSA Fall Conference, September 27-29, 2012, Philadelphia, PA.
Towards Digital Containerized Factories of Composite Architectural Panels for Complex-shaped Buildings, $36,820, PI, MAG Composites Center, Philadelphia University, 6/13-5/15.
Integrative design method of environmentally responsive building skins, $6,000, PI, Faculty Research, Scholarship and Practice-based Project Grant, Philadelphia University, 6/13-6/14.
Incorporating open source knowledge communities into the research skillset of the design student as evidenced through Prototyping of Interactive Architecture, Nexus Learning Grant, Philadelphia University, $6,000, co-PI (with Susan Frosten), 8/12-7/13.
A learning symbiosis of integrative design practices: The DEC Center Case Study, Nexus Learning Grant, Philadelphia University, $2,000, PI, 6/12-12/12.

**Professional Memberships:**
CIB's Working Commission on Architectural Management, W096, 2007 – present
Korea Construction Engineers Association, 1995-Present

# Faculty Resume

**Morna Livingston**

**Courses Taught**

| | |
|---|---|
| ADFND-101 | Design 1: Interdisciplinary Foundation Studies |
| ADFND-102 | Design 2: Foundation Studies |
| ARCH-425 | Meaning in Architecture Ornamentation |
| ARCH-434 | Water and Architecture |
| AHIST-206 | History 2: Renaissance/Baroque Architecture & Interiors |
| AHIST-305 | History 3: Early Modern Architecture & Interiors |

**Educational Credentials:**
B.A. Art and Art History, Brown University, 1963
Graduate Work in Art, University of Minnesota, 1964
M. Fine Arts, University of Wisconsin, 1965
Architectural Drawing, Summer Program, Columbia University, 1987

**Teaching Experience:**
University of Tennessee, 1987-1997
Associate Professor, Philadelphia University, 1997-present
Slavonice Studios, Czech Republic, 2009-2011

**Selected Publications and Recent Research:**
Natural History Magazine, Special Issue: "The Water Planet," *"Temples for Water,"* pp. 52-7. Text and photography. May 2009.
Italian Edition of *La Foce*, Editrice Le Balze, Pienza, Italy 2004.
Morna Livingston, *Steps to Water: the Ancient Stepwells of India*, (New York: Princeton Architectural Press, May 2002).
*Benedetta Origo, Morna Livingston, Laurie Olin, John Dixon-Hunt, La Foce: A Garden and a Landscape in Tuscany*, (Philadelphia: University of Pennsylvania Press, October 2001).
"La Foce, The Recreation of the Painter's Landscape in Southern Tuscany," *"Traditional Dwellings and Settlements Working Paper Series",* Vol. 120. (1-18). Center for Environmental Research, Berkeley, California 1999.
"The Mother Goddess, Unexpected Diva in Vernacular Preservation," *"Traditional Dwellings and Settlements Working Paper Series",* Vol. 92. P. 1-8. Center for Environmental Design Research, *International Association for the Study of Traditional Environments*, Berkeley, CA 1996.
"The Stepwells and Stepped-Ponds of Western India," *Asian Art and Culture,* Vol. VIII, no. 2. Spring-Summer. Arthur M. Sackler Gallery, Smithsonian Institution 1995.
"Dreaming in Cuban, the Crumbling of Old Havana," *Traditional Dwellings and Settlements Working Paper Series*, Vol. 67., Center for Environmental Research, Berkeley, California 1995.

**Professional Memberships:**
Editorial Advisory Board, International Association for the Study of Traditional Environments, (IASTE). UC Berkeley 2000-2011
American Institute of Yemeni Studies 2005-2011

# Faculty Resume

**Suzanne Singletary, Ph.D.**

**Courses Taught**
ARCH-422 Theories of Architecture Seminar
AHIST-306 Modern/Contemp. Arch & Interiors

**Educational Credentials:**
B.A. Major: Fine Arts, Minor: English Literature, Temple University, 1974
M.A. in Art History, University of Denver, 1981
Ph.D. in Art History, Temple University, Tyler School of Art, 2007

**Teaching Experience:**
Programs Director, Colorado Gallery of the Arts, 1980-81
Public Lecturer & Program Designer, Denver Art Museum, 1982-1983
Instructor, University of Colorado, 1980-1983
Instructor, Arapahoe Junior College, 1980-1983
Lecturer, Philadelphia Museum of Art, 1999
Adjunct Faculty, Temple University, 1999-2001
Adjunct Faculty, Philadelphia University, 1988-2001
Visiting Assistant Professor, Philadelphia University, 2001-2005
Assistant Professor, Philadelphia University, 2005-2009
Adjunct Assistant Professor, Temple University, Tyler School of Art, 2008-2011
Associate Professor, Philadelphia University, 2009-present
Director of Architectural Studies, Philadelphia University, 2009-present

**Selected Publications and Recent Research:**
*Whistler and France,* (forthcoming).
"*Voyages:* Whistler, Manet and Baudelaire," *Perspectives on Manet*, Therese Dolan, Editor (forthcoming Ashgate Publishing Company, 2012).
"*Le Chez-Soi:* men 'At Home' in *Impressionist Interiors*," catalogue essay, Impressionist Interiors, exhibition at the National Gallery of Ireland, Dublin (May 10-August 10, 2008).
"Dystopia: Goy's Cannibals." *Aurora* (Volume 5, 2004).
"Jacob Wrestling with the Angel: A Theme in Symbolist Art." *Nineteenth Century French Studies* (Spring 2004).
"Book Review: *Reading Relationally---Postmodern Perspectives on Literature and Art." Nineteenth Century French Studies* (Vol. 32, Nos. 1 & 2, Fall/Winter 2003-2004).
"Manet/Velazquez: The French Taste for Spanish Painting." *H-France*, November 2003.

**Professional Memberships:**
College Art Association
Association of the Historians of Nineteenth-Century Art
Nineteenth-Century Studies Association
Society of Architectural Historians
Midwest Art History Society
Association of Historians of American Art
Association of Art Historians

# Faculty Resume

**Edgar Stach, RA (Germany), Int'l Assoc. AIA**

**Courses Taught**
ARCH-502 Design 10: Architecture
ARCH-412 Design 8: Architecture

**Educational Credentials:**
Diplom-Ingenieur, Architekt (Dipl-Ing.) Fakultät für Architektur, Rheinisch Westfälisch Technische Hochschule Aachen, (RWTH – Aachen), Germany, 1991
IPMA Studies: Project Management Certificate, Bauhaus University Weimar and International Project Management Association, 1999

**Teaching Experience:**
Wissenschaftlicher Mitarbeiter (Research Associate, Lecture) Bauhaus Universität Weimar, Germany, 1995-1999
Assistant Professor of Architecture, University of Tennessee, 1999-2000
Associate Professor of Architecture, Tenured, The University of Tennessee, 2005-2011
Visiting Research Professor Department of Building Technology, TU Delft, Netherlands, 2007-2009
James R. Cox Professor, The University of Tennessee, 2009-2012
Director, Institute for Smart Structures (ISS), The University of Tennessee, 2010-2012
Professor of Architecture, Tenured, The University of Tennessee, 2011-2012
ORNL-UT Joint Appointment with the Oak Ridge National Laboratory and the University of Tennessee, ORNL Building Technologies Research and Integration Center, 2012-present
Professor of Architecture, Tenured, Philadelphia University, 2012-present
Director, Institute for High Performance Buildings [ihpb], Philadelphia University, 2012-present
Co-Director (interim), Institute for Performance Materials and Product Design, Philadelphia University, 2012-present

**Professional Experience:**
Architectural Intern, Bussmann Architekten, Cologne, Germany 1988 – 1990
Project Architect, Prof. Scheuermann, Flender and Partner, Aachen, Germany 1991-1993
Project Architect, Ingenhoven, Overdiek, Petzinka und Partner, Düsseldorf, Germany 1993-1995
Co-owner, Architekten Klinkhammer and Stach, Weimar and Cologne, Germany 1995-present

**Licenses/Registration:**
Registered Architect – Germany, Architektenkammer Nordrhein Westfalen (Europe) #A 100881

**Selected Publications and Recent Research/Practice:**
"Self-Generating Membrane Structures," Textile Composites and Inflatable Structures, CIMNE, Stuttgart 2005. pp. 153-164.
"Synthesis of Form, Structure and Material." On Growth and Form, Cambridge Press of Waterloo University, 2008. pp. 167-174.
"The morphology of sea shells" in "An Anthology of Structural Morphology" Edited by Rene Motro, World Scientific, Imperial College Press, 2009. pp. 172-185.
"Structural Morphology and Self Organisation", International Journal of Design & Nature and Ecodynamics, Wessex Institute of Technology, 2013.

**Professional Memberships:**
Architektenkammer Thueringen, Germany, 1995 - 2010
Architektenkammer NRW, Germany, 1994 – 95, 2010 - Present
International Association for Shell and Spatial Structures, 1991-present
Int'l Assoc. AIA International Associate Architect Member, 2007-present

**FACULTY MATRIX**
A matrix for each of the two academic years (by semester) prior to the preparation of the APR-IC, 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.

| **Fall 2013 – Faculty Matrix** | | | ARCH-412 | ARCHDSN-208 | ARCH-326 | AHIST-205 | AHIST-305 | | ARCHDSN-210 | ARCH-313 | ARCH-416 | ARCH-304 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **SDN-622 – Sust. Des. Stu.** | **MARCH-615 – Design 5** | **MARCH-621 – Vis 1** | **MARCH-622 – Vis 2** | **MARCH-631 – History 1** | **MARCH-633– History 3** | **SDN-601 - Sust. Des. Met.** | **MARCH-641 – Tech 1** | **MARCH-643 – Tech 3** | **MARCH-645 – Tech 5** | **MARCH-652 – Struct. 2** | **MARCH-661 – Prof. Man.** |
| **Brian Billings,** RA | Principal of his architecture and interior design practice since 1987 with a commitment to sustainability. Clients include residential, commercial and municipal, as well as non-profits. | | | | | | | | | | | • | |
| **Daniel Chung,** RA, PE | Research on building simulation, analysis and verification of high performance buildings to develop the next generation of adaptive façade technologies. Former architect at MGA Partners. | | • | | | | | | | • | | | |
| **Concetta Dragani** Ph.D. | Publications and presentations on Early Modern painters and the production of space in Venice and Naples in the Seventeenth Century. | | | | | | • | | | | | | |
| **Donald Dunham,** AIA | Associate Director M. Arch Program; architectural designer, London, Paris, Los Angeles, Philadelphia. Museum exhibitions for J. Paul Getty Museum and Museum of New Zealand. | | | | | | | | • | | | | |
| **Rob Fleming,** R.A., LEED AP BD&C | Director, M.S. in Sustainable Design; directs research center focusing on green materials, sustainable design, and community outreach. Author of *Design Education for a Sustainable Future.* | • | | | | | | • | | | | | |
| **Sara Gally,** NCIDQ | Interior designer and associate Francis Cauffman Architecture, Philadelphia. Leads the firm's interior design healthcare team on various projects at all stages of the design process. | | | • | | | | | | | | | |
| **Chris Harnish,** LEED GA | Has worked in the sustainable sector of the economy as well as having broad experience with building in disadvantaged communities in South Africa. | | | | | | | | • | | | | |
| **Charles Hemphill,** RA | Architect at Francis Cauffman Architecture Philadelphia, PA, 2006-present. Experience in the design and project management of large scale commercial and institutional projects. | | | • | | | | | | | | | |
| **Allan Hoffmann** | Former president of VITETTA Architects/Engineers responsible for the marketing, sales, and business development efforts of the firm as well as responsibility for financial performance. | | | | | | | | | | | | • |

| **Fall 2013 – Faculty Matrix** | | | ARCH-412 | ARCHDSN-208 | ARCH-326 | AHIST-205 | AHIST-305 | | ARCHDSN-210 | ARCH-313 | ARCH-416 | ARCH-304 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **SDN-622 – Sust. Des. Stu.** | **MARCH-615 – Design 5** | **MARCH-621 – Vis 1** | **MARCH-622 – Vis 2** | **MARCH-631 – History 1** | **MARCH-633– History 3** | **SDN-601 - Sust. Des. Met.** | **MARCH-641 – Tech 1** | **MARCH-643 – Tech 3** | **MARCH-645 – Tech 5** | **MARCH-652 – Struct. 2** | **MARCH-661 – Prof. Man.** |
| **Jennie Hydro,** NCIDQ | Project interior designer at Stantec, an international multidisciplinary planning, engineering, architecture, interior design, and landscape architecture firm. Specializes in healthcare, corporate design, graphics and wayfinding. | | | • | | | | | | | | | |
| **Kenneth Jacobs,** Ph.D. | Thirty years of professional experience in historic preservation involving preparation of historical research and the restoration, preservation, and adaptive reuse of 18th- 20th century buildings. | | | | | • | • | | | | | | |
| **Kihong Ku**, D.Des. | Research in interactive architecture using robotics, arduinos, processing, and other open source languages. Projects focus on the implications BIM for design safety prefabrication approaches. | | | | | | | | | | • | | |
| **Morna Livingston** | Architectural photographer and writer specializing in ancient and medieval water systems. Books include *Steps to Water: The Ancient Stepwells of India,* Princeton Architectural Press 2002. | | | | | | • | | | | | | |
| **Lauren Patterson** | Research in Post World War II Art, Women Artists, Contemporary American Realism, Artist's Materials and Methods, Feminist Art. | | | | | • | | | | | | | |
| **Armando Plata,** AIA, NCARB, PE | Extensive experience as an architectural designer and structural engineer. His most recent project, the "S" House in Medford, MA was completed in 2014. | | | | | | | | | | | • | |
| **Jonathan Price**, PE, CDT, LEED AP | 37 years of structural engineering experience registered in 12 states, Associate at Keast & Hood, structural engineers. Distinguished Adjunct Professor, Philadelphia University, 2008. | | | | | | | | | | | • | |
| **Michael Roden** | Francis Cauffman Architecture 2003-present. Over ten years' experience in digital rendering techniques and more recently utilizing rapid-prototyping and 3D printing as an architectural modeling method. | | | • | | | | | | | | | |
| **Andrew Simmons** | Job captain at Nelson Design, an international design firm. Services include architecture, interior design, planning, and engineering. Previously project designer at Francis Cauffman Architecture, 2007-2015. | | | • | | | | | | | | | |
| **Edgar Stach**, RA, Germany | Has received two AIA design awards for design-build projects and the 2008 AIA award for innovative teaching. Published over 50 scientific papers and technical publications. | | • | | | | | | | | | | |

| **Fall 2013 – Faculty Matrix** | | | ARCH-412 | ARCHDSN-208 | ARCH-326 | AHIST-205 | AHIST-305 | | ARCHDSN-210 | ARCH-313 | ARCH-416 | ARCH-304 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **SDN-622 – Sust. Des. Stu.** | **MARCH-615 – Design 5** | **MARCH-621 – Vis 1** | **MARCH-622 – Vis 2** | **MARCH-631 – History 1** | **MARCH-633– History 3** | **SDN-601 - Sust. Des. Met.** | **MARCH-641 – Tech 1** | **MARCH-643 – Tech 3** | **MARCH-645 – Tech 5** | **MARCH-652 – Struct. 2** | **MARCH-661 – Prof. Man.** |
| **Sara Sweeney,** RA, CSI, CDT, LEED AP, BPI Building Analyst | Founder of EcoVision Green Solutions Services LLC (now part of Haley Donovan). Worked at Susan Maxman & Partners, a nationally recognized leader in sustainable design. | | | | | | | | • | | | | |
| **Jesse Vaughn** | Project manager at Stokes Architecture in Philadelphia where he is involved in all aspects of projects, from conceptual design to construction administration. | | | | • | | | | | | | | |

| **Spring 2014 – Faculty Matrix** | | ARCH-312 | ARCH-412 | ARCHDSN-208 | ARCH-326 | AHIST-206 | AHIST-306 | | ARCH-212 | ARCH-314 | ARCH-416 | ARCH-303 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **MARCH-614 – Design 4** | **MARCH-615 – Design 5** | **MARCH-621 – Vis 1** | **MARCH-622 – Vis 2** | **MARCH-632 – History 2** | **MARCH-634– History 4** | **SDN-601 - Sust. Des. Met.** | **MARCH-642 – Tech 2** | **MARCH-644 – Tech 4** | **MARCH-645 – Tech 5** | **MARCH-651 – Struct. 1** | **MARCH-661 – Prof. Man.** |
| **Brian Billings**, RA | Principal of his architecture and interior design practice since 1987 with a commitment to sustainability. Clients include residential, commercial and municipal, as well as non-profits. | | | | | | | | | | | • | |
| **Kyle Blackwell** | Architectural designer at award-winning landscape architecture design build firm, GroundSwell. Has worked on a number of diverse projects as an independent designer and fabricator. | | | | • | | | | | | | | |
| **James Cassidy,** AIA, NCARB | Since 2005, principal and co-founder of C2 Architecture in Philadelphia. He has extensive experience in residential and large scale historic adaptive reuse projects. | | • | | | | | | | | | | |
| **Daniel Chung,** RA, PE | Research on building simulation, analysis and verification of high performance buildings to develop the next generation of adaptive façade technologies. Former architect at MGA Partners. | | • | | | | | | | • | | | |
| **Concetta Dragani** Ph.D. | Publications and presentations on Early Modern painters and the production of space in Venice and Naples in the Seventeenth Century. | | | | | • | | | | | | | |
| **Donald Dunham**, AIA | Associate Director M. Arch Program; architectural designer, London, Paris, Los Angeles, Philadelphia. Museum exhibitions for J. Paul Getty Museum and Museum of New Zealand. | • | | | | | | | | | | | |
| **Rob Fleming,** R.A., LEED AP BD&C | Director, M.S. in Sustainable Design; directs research center focusing on green materials, sustainable design, and community outreach. Author of *Design Education for a Sustainable Future.* | | | | | | | • | | | | | |
| **Matt Gindlesparger** | Former lecturer and researcher at CASE/Rensselaer Polytechnic Institute. Has worked in numerous funded research areas, including; dynamic, energy-generating façade systems and air-cleaning, bio-mechanical hybrid systems. | | | | | | | | | | • | | |
| **Craig Griffen**, RA | Extensive professional experience. Research on weaving and digital technology. Has presented and published over a dozen papers on the topic of building technology. | | | | | | | | • | | | | |

| **Spring 2014 – Faculty Matrix** | | ARCH-312 | ARCH-412 | ARCHDSN-208 | ARCH-326 | AHIST-206 | AHIST-306 | | ARCH-212 | ARCH-314 | ARCH-416 | ARCH-303 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **MARCH-614 – Design 4** | **MARCH-615 – Design 5** | **MARCH-621 – Vis 1** | **MARCH-622 – Vis 2** | **MARCH-632 – History 2** | **MARCH-634– History 4** | **SDN-601 - Sust. Des. Met.** | **MARCH-642 – Tech 2** | **MARCH-644 – Tech 4** | **MARCH-645 – Tech 5** | **MARCH-651 – Struct. 1** | **MARCH-661 – Prof. Man.** |
| **Chris Harnish,** LEED GA | Has worked in the sustainable sector of the economy as well as having broad experience with building in disadvantaged communities in South Africa. | | | | | | | | | • | | | |
| **Jason Jackson** | Currently a designer at Interface Studio Architects, an architecture office engaged in design and research projects that provide innovative sustainable solutions for their clients. | | | | • | | | | | | | | |
| **Brian Johnston**, AIA, LEED AP, NCARB | Principal of Johnston Design Studio. Provides architectural, planning and research services including the design of new structures and adaptive reuse of existing structures. | • | | | | | | | | | | | |
| **Christopher Kircher**, AIA, NCARB | Over 15 years of architectural experience; was principal in his own practice as well as a project architect at two other firms in Philadelphia. | • | | | | | | | | | | | |
| **Thomas Kirchner**, AIA, LEED AP BD&C, NCARB | Project architect at BWA Architecture. Has designed several award winning affordable housing, residential, institutional, adaptive reuse, and health care projects. | | • | | | | | | | | | | |
| **David Kratzer**, AIA | Broad professional experience, including design-build. Collaborated on funded research in architectural technologies, and maintains a small practice with connections to local not-for-profit organizations. | • | | | | | | | | • | | | |
| **Kihong Ku,** D.Des.. | Research in interactive architecture using robotics, arduinos, processing, and other open source languages. Projects focus on the implications BIM for design safety prefabrication approaches. | | | | | | | | | | • | | |
| **Sophia Lee**, LEED BD+C | Architectural designer at SchraderGroup Architecture with a focus on K-12 and higher ed. institutions. Formerly with MGA Partners specializing in higher education and institutional projects. | | | | | | | | | | | | |
| **Morna Livingston** | Architectural photographer and writer specializing in ancient and medieval water systems. Books include *Steps to Water: The Ancient Stepwells of India,* Princeton Architectural Press 2002. | | | | | • | | | | | | | |

| **Spring 2014 – Faculty Matrix** | | ARCH-312 | ARCH-412 | ARCHDSN-208 | ARCH-326 | AHIST-206 | AHIST-306 | | ARCH-212 | ARCH-314 | ARCH-416 | ARCH-303 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **MARCH-614 – Design 4** | **MARCH-615 – Design 5** | **MARCH-621 – Vis 1** | **MARCH-622 – Vis 2** | **MARCH-632 – History 2** | **MARCH-634– History 4** | **SDN-601 - Sust. Des. Met.** | **MARCH-642 – Tech 2** | **MARCH-644 – Tech 4** | **MARCH-645 – Tech 5** | **MARCH-651 – Struct. 1** | **MARCH-661 – Prof. Man.** |
| **Shaun Patchell,** AIA, LEED AP BD+C | Building envelope and VDC specialist MGA Architects, Projects include: Shipley School Student Commons, Bryn Mawr, PA; International Spy Museum at Mt. Vernon Square, Washington, DC. | | | | | | | | | | • | | |
| **Lauren Patterson** | Research in Post World War II Art, Women Artists, Contemporary American Realism, Artist's Materials and Methods, Feminist Art. | | | | | • | | | | | | | |
| **Armando Plata,** AIA, NCARB, PE | Extensive experience as an architectural designer and structural engineer. His most recent project, the "S" House in Medford, MA was completed in 2014. | | | | | | | | | | | • | |
| **Alice Price,** Ph.D. | Recent publication on Anna Ancher at the National Museum of Women in the Arts (NMWA) appeared in the autumn issue of *19th-Century-Art-Worldwide*. | | | | | | • | | | | | | |
| **Jonathan Price,** PE, CDT, LEED AP | 37 years of structural engineering experience registered in 12 states, Associate at Keast & Hood, structural engineers. Distinguished Adjunct Professor, Philadelphia University, 2008. | | | | | | | | | | | • | |
| **Michael Roden** | Francis Cauffman Architecture 2003-present. Over ten years' experience in digital rendering techniques and more recently utilizing rapid-prototyping and 3D printing as an architectural modeling method. | | | • | | | | | | | | | |
| **Jason Smith,** RA, LEED AP | Senior associate at Kieran Timberlake. Has led the design and construction of formative projects and contributed to the genesis of the firm's early research initiatives. | | | | | | | | | | | | • |
| **Suzanne Singletary,** Ph.D. | Research on interdisciplinary aspects of art, architecture, literature, music. Forthcoming book, *Whistler and France,* analyzes work of James McNeill Whistler relative to French art/ architecture. | | | | | | • | | | | | | |
| **Jesse Vaughn** | Project manager at Stokes Architecture in Philadelphia where he is involved in all aspects of projects, from conceptual design to construction administration. | | | | • | | | | | | | | |

| **Fall 2014 – Faculty Matrix** | | | ARCH-412 | ARCHDSN-208 | ARCH-326 | AHIST-205 | AHIST-305 | | MSARC-631 | ARCHDSN-210 | ARCH-313 | ARCH-416 | ARCH-304 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **SDN-622 – Sust. Des. Stu.** | **MARCH-615 – Design 5** | **MARCH-621 – Vis 1** | **MARCH-622 – Vis 2** | **MARCH-631 – History 1** | **MARCH-633– History 3** | **SDN-601 - Sust. Des. Met.** | **MSARC-631 – Research Met.** | **MARCH-641 – Tech 1** | **MARCH-643 – Tech 3** | **MARCH-645 – Tech 5** | **MARCH-652 – Struct. 2** | **MARCH-661 – Prof. Man.** |
| **Brian Billings**, RA | Principal of his architecture and interior design practice since 1987 with a commitment to sustainability. Clients include residential, commercial and municipal, as well as non-profits. | | | | | | | | | | | | • | |
| **Kyle Blackwell** | Architectural designer at award-winning landscape architecture design build firm, GroundSwell.Has worked on a number of diverse projects as an independent designer and fabricator. | | | • | | | | | | | | | | |
| **James Doerfler**, AIA | Director of Architecture Programs; more than 25 years of international practice experience along with his academic experience. Projects in Australia, China, Spain, and the US. | | | | | | | | • | | | | | |
| **Concetta Dragani** Ph.D. | Publications and presentations on Early Modern painters and the production of space in Venice and Naples in the Seventeenth Century. | | | | | | • | | | | | | | |
| **Rob Fleming,** R.A., LEED AP BD&C | Director, M.S. in Sustainable Design; directs research center focusing on green materials, sustainable design, and community outreach. Author of *Design Education for a Sustainable Future.* | • | | | | | | • | | | | | | |
| **Sara Gally,** NCIDQ | Interior designer and associate Francis Cauffman Architecture, Philadelphia. Leads the firm's interior design healthcare team on various projects at all stages of the design process. | | | • | | | | | | | | | | |
| **Matt Gindlesparger** | Former lecturer and researcher at CASE/Rensselaer Polytechnic Institute. Has worked in numerous funded research areas, including; dynamic, energy-generating façade systems and air-cleaning, bio-mechanical hybrid systems. | | • | | | | | | | | • | | | |
| **Chris Harnish,** LEED GA | Has worked in the sustainable sector of the economy as well as having broad experience with building in disadvantaged communities in South Africa. | | | | | | | | | • | | | | |
| **Andrew Hart** | Professional practice in both large institutional and civic projects. Research includes developing analog/digital hybrid means of architectural representation, and reinhabitation of post-industrial spaces. | | | | | | | | | • | | | | |

# Fall 2014 – Faculty Matrix

| Faculty member | Summary of expertise, recent research, or experience | SDN-622 – Sust. Des. Stu. | MARCH-615 – Design 5 | MARCH-621 – Vis 1 | MARCH-622 – Vis 2 | MARCH-631 – History 1 | MARCH-633– History 3 | SDN-601 - Sust. Des. Met. | MSARC-631 – Research Met. | MARCH-641 – Tech 1 | MARCH-643 – Tech 3 | MARCH-645 – Tech 5 | MARCH-652 – Struct. 2 | MARCH-661 – Prof. Man. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ARCH-412 | ARCHDSN-208 | ARCH-326 | AHIST-205 | AHIST-305 | | MSARC-631 | ARCHDSN-210 | ARCH-313 | ARCH-416 | ARCH-304 | ARCH-503 | |
| **Charles Hemphill,** RA | Architect at Francis Cauffman Architecture Philadelphia, PA, 2006-present. Experience in the design and project management of large scale commercial and institutional projects. | | | | | | | | | | | • | | |
| **Alan Hoffmann** | Former president of VITETTA Architects/Engineers responsible for the marketing, sales, and business development efforts of the firm as well as responsibility for financial performance. | | | | | | | | | | | | | • |
| **Jennie Hydro,** NCIDQ | Project interior designer at Stantec, an international multidisciplinary planning, engineering, architecture, interior design, and landscape architecture firm. Specializes in healthcare, corporate design, graphics and wayfinding. | | | • | | | | | | | | | | |
| **Kenneth Jacobs,** Ph.D. | Thirty years of professional experience in historic preservation involving preparation of historical research and the restoration, preservation, and adaptive reuse of 18th- 20th century buildings. | | | | | • | | | | | | | | |
| **Thomas Kirchner**, AIA, LEED AP BD&C, NCARB | Project architect at BWA Architecture. Has designed several award winning affordable housing, residential, institutional, adaptive reuse, and health care projects. | | • | | | | | | | | | | | |
| **David Kratzer**, AIA | Broad professional experience, including design-build. Collaborated on funded research in architectural technologies, and maintains a small practice with connections to local not-for-profit organizations. | | | | | | | | | | • | | | |
| **Kihong Ku,** D.Des.. | Research in interactive architecture using robotics, arduinos, processing, and other open source languages. Projects focus on the implications BIM for design safety prefabrication approaches. | | | | | | | | | | | • | | |
| **Sophia Lee**, LEED BD+C | Architectural designer at SchraderGroup Architecture with a focus on K-12 and higher ed. institutions. Formerly with MGA Partners specializing in higher education and institutional projects. | | | | | | | | | • | | | | |

| **Fall 2014 – Faculty Matrix** | | | ARCH-412 | ARCHDSN-208 | ARCH-326 | AHIST-205 | AHIST-305 | | MSARC-631 | ARCHDSN-210 | ARCH-313 | ARCH-416 | ARCH-304 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **SDN-622 – Sust. Des. Stu.** | **MARCH-615 – Design 5** | **MARCH-621 – Vis 1** | **MARCH-622 – Vis 2** | **MARCH-631 – History 1** | **MARCH-633– History 3** | **SDN-601 - Sust. Des. Met.** | **MSARC-631 – Research Met.** | **MARCH-641 – Tech 1** | **MARCH-643 – Tech 3** | **MARCH-645 – Tech 5** | **MARCH-652 – Struct. 2** | **MARCH-661 – Prof. Man.** |
| **Lauren Patterson** | Research in Post World War II Art, Women Artists, Contemporary American Realism, Artist's Materials and Methods, Feminist Art. | | | | | • | | | | | | | | |
| **Armando Plata,** AIA, NCARB, PE | Extensive experience as an architectural designer and structural engineer. His most recent project, the "S" House in Medford, MA was completed in 2014. | | • | | | | | | | | | | | |
| **Alice Price,** Ph.D. | Recent publication on Anna Ancher at the National Museum of Women in the Arts (NMWA) appeared in the autumn issue of *19th-Century-Art-Worldwide*. | | | | | | • | | | | | | | |
| **Jonathan Price,** PE, CDT, LEED AP | 37 years of structural engineering experience registered in 12 states, Associate at Keast & Hood, structural engineers. Distinguished Adjunct Professor, Philadelphia University, 2008. | | | | | | | | | | | | • | |
| **Michael Roden** | Francis Cauffman Architecture 2003-present. Over ten years' experience in digital rendering techniques and more recently utilizing rapid-prototyping and 3D printing as an architectural modeling method. | | | • | | | | | | | | | | |
| **Sara Schmidt**, AIA | Architect at PJA Architecture. Specializes in small to medium commercial projects. Works with Habitat for Humanity and is active with the Philadelphia Women in Architecture. | | | | | | | | | | | • | | |
| **Andrew Simmons** | Job captain at Nelson Design, an international design firm. Services include architecture, interior design, planning, and engineering. Previously project designer at Francis Cauffman Architecture, 2007-2015. | | | • | | | | | | | | | | |
| **Jesse Vaughn** | Project manager at Stokes Architecture in Philadelphia where he is involved in all aspects of projects, from conceptual design to construction administration. | | | | • | | | | | | | | | |

# Spring 2015 – Faculty Matrix

| Faculty member | Summary of expertise, recent research, or experience | | ARCH-312 | ARCH-412 | ARCH-326 | AHIST-206 | AHIST-306 | | ARCH-212 | ARCH-314 | ARCH-416 | ARCH-303 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **SDN-621 – Sust. Des. Stu.** | **MARCH-614 – Design 4** | **MARCH-615 – Design 5** | **MARCH-622 – Vis 2** | **MARCH-632 – History 2** | **MARCH-634– History 4** | **SDN-601 - Sust. Des. Met.** | **MARCH-642 – Tech 2** | **MARCH-644 – Tech 4** | **MARCH-645 – Tech 5** | **MARCH-651 – Struct. 1** | **MARCH-661 – Prof. Man.** |
| **Brian Billings**, RA | Principal of his architecture and interior design practice since 1987 with a commitment to sustainability. Clients include residential, commercial and municipal, as well as non-profits. | | | | | | | | | | | • | |
| **Kyle Blackwell** | Architectural designer at award-winning landscape architecture design build firm, GroundSwell.<br>Has worked on a number of diverse projects as an independent designer and fabricator. | | | | • | | | | | | | | |
| **James Cassidy,** AIA, NCARB | Since 2005, principal and co-founder of C2 Architecture in Philadelphia. He has extensive experience in residential and large scale historic adaptive reuse projects. | | • | | | | | | | | | | |
| **Ivano D'Angella,** RA, NCARB | Principal of Ivano D'Angella Architects. Has maintained a small design-build firm in Philadelphia since 1992, specializing in small to mid-size residential and commercial projects. | | • | | | | | | | | | | |
| **Concetta Dragani** Ph.D. | Publications and presentations on Early Modern painters and the production of space in Venice and Naples in the Seventeenth Century. | | | | | • | | | | | | | |
| **Rob Fleming,** R.A., LEED AP BD&C | Director, M.S. in Sustainable Design; directs research center focusing on green materials, sustainable design, and community outreach. Author of *Design Education for a Sustainable Future.* | • | | | | | | • | | | | | |
| **Matt Gindlesparger** | Former lecturer and researcher at CASE/Rensselaer Polytechnic Institute. Has worked in numerous funded research areas, including; dynamic, energy-generating façade systems and air-cleaning, bio-mechanical hybrid systems. | | | • | | | | | | | • | | |
| **Craig Griffen**, RA | Extensive professional experience. Research on weaving and digital technology. Has presented and published over a dozen papers on the topic of building technology. | | | | | | | | • | | | | |
| **Chris Harnish,** LEED GA | Has worked in the sustainable sector of the economy as well as having broad experience with building in disadvantaged communities in South Africa. | | | | | | | | | • | | | |

| **Spring 2015 – Faculty Matrix** | | | ARCH-312 | ARCH-412 | ARCH-326 | AHIST-206 | AHIST-306 | | ARCH-212 | ARCH-314 | ARCH-416 | ARCH-303 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **SDN-621 – Sust. Des. Stu.** | **MARCH-614 – Design 4** | **MARCH-615 – Design 5** | **MARCH-622 – Vis 2** | **MARCH-632 – History 2** | **MARCH-634– History 4** | **SDN-601 - Sust. Des. Met.** | **MARCH-642 – Tech 2** | **MARCH-644 – Tech 4** | **MARCH-645 – Tech 5** | **MARCH-651 – Struct. 1** | **MARCH-661 – Prof. Man.** |
| **Allan Hoffmann** | Former president of VITETTA Architects/Engineers responsible for the marketing, sales, and business development efforts of the firm as well as responsibility for financial performance. | | | | | | | | | | | | • |
| **Jason Jackson** | Currently a designer at Interface Studio Architects, an architecture office engaged in design and research projects that provide innovative sustainable solutions for their clients. | | | | • | | | | | | | | |
| **Thomas Kirchner**, AIA, LEED AP BD&C, NCARB | Project architect at BWA Architecture. Has designed several award winning affordable housing, residential, institutional, adaptive reuse, and health care projects. | | | • | | | | | | | | | |
| **David Kratzer**, AIA | Broad professional experience, including design-build. Collaborated on funded research in architectural technologies, and maintains a small practice with connections to local not-for-profit organizations. | | • | | | | | | | • | | | |
| **Kihong Ku,** D.Des.. | Research in interactive architecture using robotics, arduinos, processing, and other open source languages. Projects focus on the implications BIM for design safety prefabrication approaches. | | | | | | | | | | • | | |
| **Sophia Lee**, LEED BD+C | Architectural designer at SchraderGroup Architecture with a focus on K-12 and higher ed. institutions. Formerly with MGA Partners specializing in higher education and institutional projects. | | | | | | | | | • | | | |
| **Evan Litvin** | Project manager and designer of residential projects, Atrium Design Group, Worked on “Wendy” HWKN's winning entry for MOMA PS1; Architectural designer, Bohlin Cywinski Jackson, 2012-14. | | • | | | | | | | | | | |
| **Morna Livingston** | Architectural photographer and writer specializing in ancient and medieval water systems. Books include *Steps to Water: The Ancient Stepwells of India,* Princeton Architectural Press 2002. | | | | | • | | | | | | | |
| **Lea Oxenhandler,** LEED AP | Architectural designer, KieranTimberlake. While at KT, she has worked on large scale civic, institutional, and government projects such as the United States Embassy, London, UK. | | | | • | | | | | | | | |

| **Spring 2015 – Faculty Matrix** | | | ARCH-312 | ARCH-412 | ARCH-326 | AHIST-206 | AHIST-306 | | ARCH-212 | ARCH-314 | ARCH-416 | ARCH-303 | ARCH-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty member** | **Summary of expertise, recent research, or experience** | **SDN-621 – Sust. Des. Stu.** | **MARCH-614 – Design 4** | **MARCH-615 – Design 5** | **MARCH-622 – Vis 2** | **MARCH-632 – History 2** | **MARCH-634– History 4** | **SDN-601 - Sust. Des. Met.** | **MARCH-642 – Tech 2** | **MARCH-644 – Tech 4** | **MARCH-645 – Tech 5** | **MARCH-651 – Struct. 1** | **MARCH-661 – Prof. Man.** |
| **Lauren Patterson** | Research in Post World War II Art, Women Artists, Contemporary American Realism, Artist's Materials and Methods, Feminist Art. | | | | | • | | | | | | | |
| **Armando Plata,** AIA, NCARB, PE | Extensive experience as an architectural designer and structural engineer. His most recent project, the "S" House in Medford, MA was completed in 2014. | | | | | | | | | | | • | |
| **Alice Price,** Ph.D. | Recent publication on Anna Ancher at the National Museum of Women in the Arts (NMWA) appeared in the autumn issue of *19th-Century-Art-Worldwide*. | | | | | | • | | | | | | |
| **Suzanne Singletary,** Ph.D. | Research on interdisciplinary aspects of art, architecture, literature, music. Forthcoming book, *Whistler and France,* analyzes work of James McNeill Whistler relative to French art/ architecture. | | | | | | • | | | | | | |

**MASTER OF ARCHITECTURE FACULTY** [who have taught B.Arch courses in the past two academic years now cross-listed with M.Arch courses]. A description of qualifications, teaching focus, and the manner in which faculty (full-time and adjunct faculty) members remain current in their knowledge of the changing demands of the discipline, practice and licensure as well as past and projected research (funded or otherwise), scholarship, and creative activities. Also see faculty matrix in addition to full-time faculty resumes.

**Brian Billings**, RA
Adjunct Faculty; B.A., Design of the Environment, University of Pennsylvania; M.Arch, University of Pennsylvania.
Teaching Focus: Structures. Mr. Billings has had his own architecture and interior design practice since 1987 in Norristown, Pennsylvania, with a commitment to sustainability. The clients include residential, commercial and municipal, as well as non-profit agencies.

**Kyle Blackwell**
Adjunct Faculty; B. Arch, Philadelphia University.
Teaching Focus: Digital modeling. Urban and architectural designer, Groundswell Design Group. Previously worked on a number of diverse projects as an independent designer and fabricator. Architecture and design collaboration with Todd Rubio and ID Architects for Revolution Jewelers, Atlantic City, NJ. Teamed up with Jun Young Suh and Todd Rubio to design, build, and install interior of 'Yanako' restaurant on Main street in Manayunk, Philadelphia. Also, collaboration with Point b design on development of design parameter driven toolsets in Grasshopper/Rhino for the generation, exploration, iteration, and output of multiple facade studies, panelization studies and patternization on surface studies.

**David Breiner**, Ph.D.
Associate Professor and Associate Dean; B.Arch, Univ. of Notre Dame; Ph.D, History of Architecture and Urbanism, Cornell Univ.
Teaching Focus: Architectural history and theory. Teaches and coordinates history and theory of architecture courses. He worked as an architectural historian for the NYC Landmarks Preservation Commission for many years, and more recently has researched the architectural history of Philadelphia. Recent research on the architectural history of the East Falls district of Philadelphia is currently in manuscript form; publication is forthcoming.

**James Cassidy,** AIA, NCARB
Adjunct Faculty; B.S. Arch and B.S. Civil Engineering, Lehigh University; M. Arch, University of Washington, Seattle; Architecture exchange, RWTH Aachen, Germany.
Teaching Focus: Building tectonics and comprehensive design. Principal and co-founder in 2005 of C2 Architecture, a full-service and design-based firm located in Philadelphia. He has extensive experience in residential and large scale historic adaptive reuse projects.

**Daniel Chung,** RA, PE
Assistant Professor (2010-2013); B.S.E in Civil Engineering and B.A in Design of the Environment, University of Pennsylvania; M.S.E in Structural Engineering, Princeton University; M. Arch, Yale School of Architecture.
Teaching Focus: Building technology, tectonics, and design. Coordinated and taught building technology courses and upper level studios with a focus on developing analytical skills related to building science and performance. Research on building simulation, analysis and verification of high performance buildings to develop the next generation of adaptive façade technologies. Architect at MGA Partners and as an engineer at Keast & Hood Co. in Philadelphia. Project work focused on buildings for higher education and historic structures. As an engineer at Dewhurst MacFarlane in New York City he specialized in structural glazing and façade engineering.

**Ivano D'Angella,** RA, NCARB
Adjunct faculty; B. Arch, Temple University.Teaching Focus: Design and urban housing. Principal of Ivano D'Angella Architects, Philadelphia. Began teaching at Temple University in 1990 and Philadelphia

University in 1998; has maintained a small design-build firm in Philadelphia since 1992, specializing in small to mid-size residential and commercial projects.

**James Doerfler**, AIA
Professor and Director of Architecture Programs; B.A. Univ. of Hartford; M. Arch, Syracuse Univ.
Teaching Focus: Technology, theory, and design. More than 25 years of international practice experience along with his academic experience. He has worked with Raphael Vinoly, Richard Gluckman and Fox & Fowle in New York City and PTW in Sydney. His projects have included work in the United States, China, Spain, Switzerland and Australia. As faculty of the University of Technology, Sydney in 1998, he became an appointed Lecturer in Design and Technology, interim Head of Department and Course Director for the Bachelor of Arts in Architecture. He developed a research focus on contemporary technologies in architecture and interdisciplinary teaching. In 2005, Prof. Doerfler was appointed Associate Professor at Cal Poly San Luis Obispo and was the Associate Department Head from 2010-2013 and the Interim Department Head 2013-2014. Professor Doerfler is the President of the Building Technology Educators Society (BTES) and a member of the visiting team pool for the NAAB accreditation visits, representing the ACSA.

**Concetta Dragani,** Ph.D.
Adjunct Faculty; B.A., Chestnut Hill College; M.A., Art History, Temple University; Ph.D., Art History, Temple University.
Teaching Focus: Renaissance, baroque, and early modern architecture and interiors. Has written on the Early Modern painter-etcher; also on Salvator Rosa, Pietro Testa, Ludovico Carracci, and Luca Giordano.
Paper “Confronting the Code: the Production of Space in Venice and Naples in the Seventeenth Century,” delivered at the Graduate Seminar in the Humanities: Tradition and Circulation of Knowledge, 1605-1797: from the Interdict to the fall of the Republic, Venice International University, Venice, Italy, 2005.
Paper “Coming into Focus: the Influence of Bourgeois Culture in Seventeenth Century Neapolitan Art,” delivered at the Art History Graduate Symposium: Crisis and Convergence: Explorations in 17th and 18th Century Art, Arizona State University and the Phoenix Art Museum, 2007.

**Donald Dunham**, AIA
Associate Professor and Associate Director M. Arch Program; Director of CABE Exhibitions; B.S. Architecture, Univ. of Southern California; M.Arch, Victoria Univ. of Wellington, NZ.
Teaching Focus: Technology, theory, and design. His many years of practice with a range of firms and institutions has provided him with broad experience on tectonic and design issues in studio as well as the several electives he teaches. He has pursued a research agenda dealing with architectural design and theory topics. Research on the relationship of nature, architecture, technology and utopia have resulted in numerous conference papers and publications.

**Sarah Endriss,** ASLA
Adjunct Faculty; B.S. Roger Williams University, M.L.A., State University of New York.
Teaching focus: sustainable design and landscape architecture. Freelance Landscape Designer 2004-present; small residential projects with emphasis on sustainable design, raingardens, native plants and habitat creation. Former landscape designer with Viridian Landscape Studio, 2006-2012, Landscape designer with Lager Raabe Skafte Landscape Architects, 2004-2006, and landscape designer and historic preservation planning with Wallace Roberts & Todd, Philadelphia, 2002-2004.

**Rob Fleming,** R.A., LEED AP BD&C
Associate Professor and Director, M.S. in Sustainable Design, Salaman Family Chair in Sustainable Design; B.Arch., Temple University; M.Arch., Virginia Polytechnic Institute and State University, Washington Alexandria Architecture Consortium.
Teaching Focus: Sustainable design. Founded the Master of Science in Sustainable Design Program, an interdisciplinary degree program fostering collaboration, integrated design and creative exploration as the cornerstone of successful sustainable design practice. In 2000, Prof. Fleming co-founded the Engineering and Design Institute, an interdisciplinary research center focusing on green materials, sustainable design and community outreach. He is a founding board member of the Delaware Valley Green Building Council,

and currently serves on the United States Green Building Council sub-committee on education for building professionals. Author of *Design Education for a Sustainable Future.*

**Sara Gally,** NCIDQ
Adjunct Faculty; B.S. in Interior Design, Philadelphia University
Teaching Focus: Digital modeling. Interior Designer and Associate at Francis Cauffman Architecture and Planning in Philadelphia specializing in Healthcare Design. Responsible for leading the firm's healthcare team on various projects at all stages of the design process, from schematics through construction. Ms. Gally is also active in marketing of new projects, as well as developing and maintaining new and existing client relationships.

**Matt Gindlesparger**,
Assistant Professor; B.S. Southern Illinois Univ.; B.Arch, M.Arch, Univ. of Arizona.
Teaching Focus: High performance building systems and design. Prior to Philadelphia University, he was a lecturer and researcher at the Center for Architecture Science and Ecology, (CASE) at Rensselaer Polytechnic Institute. At CASE, Prof. Gindlesparger focused on the development, design, prototyping, and physical manifestation of novel building systems and technologies, at multiple scales. He has worked in numerous funded research areas, including; dynamic, energy-generating façade systems and air-cleaning, bio-mechanical hybrid systems, to deliver physical prototypes, demonstration systems, and large-scale deployments for testing and evaluation.

**Craig Griffen**, RA
Associate Professor; B.Environmental Design, Miami Univ.; M.Arch, Washington Univ.
Teaching Focus: Architecture, technology, and design. His research on tectonic topics (weaving, digital technology) and experience in the professional world has prepared to teach varied courses recently, from Experimental Structures to Design/Build. Professor Griffen has presented and published over a dozen papers on the topic of building technology, especially in the areas of sustainability, weaving & architecture and affordable housing. His most recent publication, "Questioning the Role of Online Education in the Architectural Design Studio" can be found in the ARCC Journal, 2015.

**Chris Harnish,** LEED GA
Associate Professor; B.A. Environmental Studies and English Literature, Denison University; M.Arch, Univ. of Oregon.
Teaching Focus: Technology, social Issues, and design. Coordinates 5$^{th}$-year design and teaches a social issues studio as well as several technology courses. He has worked in the sustainable sector of the economy as well as having extensive experience with building in disadvantaged communities in South Africa.

**Andrew Hart**
Adjunct Faculty; B. Arch. Temple University, Tyler School of Arch; M.Arch, Cornell Univ.
Teaching Focus: Technology, digital modeling, technics of communication and design. Professional practice in both large institutional and civic projects. His academic research includes developing and teaching analog/digital hybrid means of architectural representation, and research into re-inhabitation of post-industrial spaces. Led a variety of student projects interacting with the greater Philadelphia community including design and construction of a crowdsourced park installation Directed a team of graduate students for the Historic American Buildings Survey of the Richard Neutra designed Hasserick House. 2015 Eidlitz Fellowship recipient (Cornell University). John Hubert Architects, 2013-2015; Claflen Associates, Architects + Planners, 2008-2012; Bohlin Cywinski Jackson, 2005 – 2008; Stewardson Memorial Competition, committee member, 2009-present.

**Charles Hemphill,** RA
Adjunct Faculty; B. Arch, Temple University, Tyler School of Art.
Teaching Focus: Building technology and digital modeling. Architect, Francis Cauffman Architecture Philadelphia, PA, 2006-present. Projects and visualization: Coop Cancer Institute (3ds Max, V-Ray, Autocad), Atlantic Sports Health Institute (3ds Max, Mental Ray, Autocad), Annex Building at Rivertown

(3ds Max, V-Ray, Autocad, Adobe Illustrator), “L Home” Project (Rhinoceros, 3ds Max, V-Ray), “Habitat” Site Usage Diagram (Illustrator, Maya, Mental Ray), Design Philadelphia: Corian Bench Competition, Finalist (Rhino, V-Ray, Corian).

**Alan Hoffman**
Adjunct Faculty; B.S. Business Administration, Drexel University.Teaching Focus: Professional management. Former president of VITETTA Architects/Engineers, a firm with several locations across the country. Responsible for the marketing, sales, and business development efforts of the firm as well as responsibility for financial performance of VITETTA. In addition, Mr. Hoffmann led VITETTA’s policy and strategy team responsible for the expansion of the firm both through new geographic markets and new business classes. Currently he is a member of the Delaware River Waterfront Corporation.

**Jennie Hydro,** NCIDQ
Adjunct Faculty; B.S. Interior Design, Philadelphia University.
Teaching Focus: Visualization. The focus is on Rhino, 3DS Max, SketchUp, Photoshop, Illustrator, and appropriate presentation techniques. She is currently a project interior designer at Stantec, an international multidisciplinary firm with over 250 locations. Her specialties include healthcare and corporate design, graphics & wayfinding.

**Jason Jackson**
Adjunct Faculty; B. Environmental Design, University of Colorado; M. Arch. University of Pennsylvania.
Teaching Focus: Visualization, advanced modeling. Jason is currently a designer at Interface Studio Architects, an architecture office engaged in design and research projects in cities across the US. Interface works closely with project stakeholders to produce buildings, master plans, installations, and conversations that provide innovative solutions for their clients while productively addressing changing climates, lifestyles, technologies, and urban environments. Among Jason’s skills are AutoCAD, Rhino, V-Ray, SketchUp, Grasshopper, Revit, Adobe (Photoshop, Illustrator, In-Design, Premier, After Effects).

**Kenneth Jacobs**, Ph.D.
Adjunct Faculty; B.S. Ed., Temple University, B.Arch., Temple University; M.S. Arch., University of Pennsylvania, Ph.D. Arch., University of Pennsylvania.
Teaching Focus: Historic preservation and history of architecture and interiors. Experience includes nearly thirty years of progressive professional experience in historic preservation involving preparation of historical research, historic structure reports, and feasibility studies directed toward restoration, preservation, and adaptive reuse of 18th through early 20th century American buildings in rural, suburban and urban environments. As project manager at RMJM Hillier, he was responsible for the preservation and reconstruction of the Baptist Temple at Temple University. This renovation included the complete restoration of the Romanesque facade, while the inside of the building boasts a modern design with high ceilings, intricate stained glass windows and a thrust stage that extends into the 1200-seat theater.

**Brian Johnston**, AIA, LEED AP, NCARB
Adjunct Faculty; B. Arch. University of Kentucky; M. Arch. University of Pennsylvania.
Teaching Focus: Design. He is the owner of Johnston Design Studio, a small Center City Philadelphia architectural design firm providing architectural, planning and research services including the design of new structures and adaptive reuse of existing structures. Mr. Johnston’s focus is thoughtful design, quality craftsmanship and environmentally responsible strategies.

**Christopher Kircher**, AIA, NCARB
Adjunct Faculty; B. Arch, Philadelphia University.
Teaching Focus: Design. Architect, Metcalfe Architecture & Design, Philadelphia, PA, 2006-2009, 2013-present. Focus on social spaces—residential, commercial and institutional. Over 15 years of architectural experience, having been a principal in his own practice as well as a project architect at two other firms in the Philadelphia area. Also a visiting critic at Temple University and Mercer County Community College. Founding Partner/Principal, Fishtank PHL LLC, Philadelphia, PA, 2008-2013; several award winning

projects in addition to extensive press and publication. Active faculty/sponsor with *Freedom by Design*, the student design-build wing of the AIAS.

**Thomas Kirchner**, AIA, LEED AP BD&C, NCARB
Adjunct Faculty; B.A. Phil., Colgate University; M. Arch, University of Pennsylvania.
Teaching Focus: Building tectonics and comprehensive design. Active in the design industry for over 15 years, Thomas Kirchner has designed for a range of project types, including affordable housing, non-profit, residential, institutional, historic preservation and health care. As project architect at BWA Architecture and Planning in Philadelphia, he has designed several award winning projects while providing expertise in the implementation of three-dimensional information modeling in all project phases. He was project architect of Connelly House, an eight story, 64,000 square foot, 79 unit affordable housing structure in Center City Philadelphia. The project was the recipient of the AIA Philadelphia 2010 Community Design award.

**David Kratzer**, AIA
Associate Professor; B.Arch, Univ. of North Carolina-Charlotte; M.Arch, Univ. of Pennsylvania.
Teaching Focus: Technology, design-build. Teaches and coordinates studios from years two through five, as well as technology courses. He has broad professional experience, including many hands-on projects, has collaborated on funded research in the field of architectural technologies, and maintains a small practice with connections to local not-for-profit organizations.

**Kihong Ku,** D.Des.
Associate Professor; B.S., M.S. Engineering (Architecture), Seoul National Univ.; M.Design Studies, Management of Design and Construction, Harvard Univ. Graduate School of Design; D.Des. Technology and Management, Harvard Univ. Graduate School of Design.
Teaching Focus: Digital fabrication, visualization, and design. Dr. Ku teaches and coordinates digital technologies and building technologies courses in architecture, including courses in visualization that cover digital modeling, advanced modeling, experimental modeling, construction detailing and integrated project documentation. He also teaches a 5$^{th}$-year design studio which investigates interactive architecture through the use of robotics, arduinos, processing, and other open source languages. Current research projects focus on the implications of Building Information Modeling (BIM) for design safety practices and novel prefabrication approaches. His research has been funded by various public and private funding agencies including NIOSH, Skanska USA Building, the Research Affiliates Program at Virginia Tech, and Philadelphia University.

**Sophia Lee**, LEED BD+C
Adjunct Faculty; B.S. Arch., University of Illinois at Urbana-Champaign; M.Arch., University of Virginia.
Teaching Focus: Building technology and design. Architectural designer with the SchraderGroup Architecture with a focus on K-12 and higher ed. institutions. Formerly with MGA Partners Architects specializing in higher education and institutional projects. Active with Philly *Girls Do Good!*, an initiative of Locus Partners to celebrate women leaders in design and community building and to promote their good works. Representing a diversity of organizations, these women are committed to improving the public realm, advancing social and environmental justice, and facilitating the success of local communities and businesses. Established the PGDG! Blog. Board Member, Friends of Eastern State Penitentiary Park.

**Evan Litvin**
Adjunct Faculty; B.A. Arch, Washington University; M.Arch, Univ. of Pennsylvania.
Teaching Focus: Building tectonics and design. Currently project manager and designer for a range of high end residential projects at Atrium Design Group, Philadelphia. Assisted with model building and production for Wendy, HWKN's winning entry for the MOMA PS1 Young Architects Program, 2012; Architectural Designer, Bohlin Cywinski Jackson, 2012-14.

**Morna Livingston**
Associate Professor; B.A. Art and Art History, Brown University; M.F.A., University of Wisconsin.Teaching Focus: Design foundations studio, history of architecture, architectural photography. Architectural

photographer and writer specializing in ancient and medieval water systems and cultural landscapes. Books include *Steps to Water: The Ancient Stepwells of India,* Princeton Architectural Press 2002 and *La Foce: A Garden and Landscape in Tuscany,* with co-authors Benedetta Origo, Laurie Olin and John Dixon Hunt, University of Pennsylvania Press 2001. Livingston serves on the Advisory Board of the International Association for the Study of Traditional Environments, UC Berkeley, and is Head of the Department of Cultural Landscapes at the Centre for the Future in Slavonice in the Czech Republic. Fellowships include the American Institute for Indian Studies 1988-9; The American Center for Yemeni Studies 2005-6; the University of Tennessee, Knoxville; Philadelphia University, the Fulbright Association, and two National Endowment for the Humanities Seminars: Columbia University, Sacred and Profane: Indian Art and Architecture 1992, and University of Notre Dame: The Middle East Between Rome and Persia: Early Christianity on the Path to Islam 2007. Currently she is writing and photographing two new books-one on cisterns in the highlands of Yemen, the other on cottage gardens of Southern Bohemia. Her photographs are also included in the Museum of Natural History's exhibition 'Water=H2O' currently circulating under the auspices of the United Nations to Asia, Canada and South America.

**Lea Oxenhandler,** LEED AP
Adjunct Faculty; B.A. Arch, Washington University; M.Arch. and M.S. Engineering in Product Design, University of Pennsylvania.
Teaching Focus: Design. Architectural designer, KieranTimberlake. While at KT, she has worked on large scale civic, institutional, and government projects such as the United States Embassy, London, UK and an integrated Master Plan for Rice University. Founding member and serves as the President of the Board of Directors for the School Redevelopment Initiative, a 501c3 non-profit organization that advocates for reuse and redevelopment of former schools and other vacant buildings in Philadelphia. National Institute of Building Sciences Member; Award, BIM Development for STEM Education, 2014; First Place, Fels Institute Public Policy Challenge, 2012.

**Shaun Patchell,** AIA, LEED AP BD+C
Adjunct Faculty; B.Arch. Penn State.
Teaching Focus: Building technology. Currently building envelope and VDC specialist MGA Architects, Philadelphia; projects include: Shipley School Student Commons, International Spy Museum at Mt. Vernon Square, Washington, DC, Temple University's Morgan Residence Hall, Princeton University's Jadwin Hall Renovation. Former architect with Kieran Timberlake Architects, Philadelphia. Member of SEED®, a principle-based network of individuals and organizations dedicated to building and supporting a culture of civic responsibility and engagement in the built environment and the public realm.

**Lauren Patterson**
Adjunct Faculty; B.F.A., Beaver College (now Arcadia University), M.A. Temple University, Ph.D. candidate, Temple University.
Teaching Focus: Architectural history. Research in post-World War II art, women artists, contemporary American realism, artist's materials and methods, and feminist art. She has published on the role of women in art and on late-19th-century art.

**Armando Plata,** AIA, NCARB, PE
Assistant Professor (2009-2015); B.S. Architectural Engineering, California Polytechnic State University; M. Arch, University of California Los Angeles.
Teaching Focus: Structures and design. Structural Designer, Integrated Structural Design. San Diego. CA, 1985-1988; Structural Engineer Associate, Building Inspection Department. San Diego. CA, 1988-1992; Principal Architect and Structural Engineer, Tekhne Studio, Mexico and San Diego, CA, 1993-2003; Principal Architect and Structural Engineer, One_design Office, Philadelphia, PA 2004-2015;
Project Structural Engineer, Le Messurier Consultants. Cambridge. MA, 2005-2006. His most recent project, the "S" House in Medford, MA was completed in 2014.

**Alice Price,** Ph.D.
Adjunct Faculty; M.Ed., LaSalle University; M.A. (History), American University; Ph.D. (European art and culture at the turn of the century), Temple Univ. Tyler School of Art.

Teaching Focus: Modern and contemporary art and architecture. Her review of the spring 2013 show on Anna Ancher at the National Museum of Women in the Arts (NMWA) appeared in the autumn issue of *19th-Century-Art-Worldwide*. She is the author of "Gendered Interiors" published on NMWA's website.

**Jonathan Price,** PE, CDT, LEED AP
Adjunct Faculty; B. S. Architectural Engineering, University of Colorado; M.S. Civil Engineering, Drexel University.
Teaching Focus: Structures. Mr. Price has 37 ears of structural engineering experience and he is registered in 12 states, and is a member of the Engineer's Club of Philadelphia. He has been an adjunct faculty since 1999, and in 2006 received Philadelphia University's Distinguished Adjunct Professor. He is an Associate at Keast & Hood, a structural engineering firm founded in 1953, with offices in Washington D.C. and Philadelphia. He augments his project responsibilities by serving as the firm's quality assurance manager and training coordinator, with an analytical eye and practical mindset, he solves complex problems by reducing them to simple components that facilitate resolution.

**Evan Pruitt**
Adjunct Faculty; BSAD, Massachusetts Institute of Technology; M.Arch, University of California, Berkeley.
Teaching Focus: Design. She currently works at eP/studio in Philadelphia. Ms. Pruitt designed *Casa Coya*, a house in Chile that has received numerous awards and was selected to participate in the Chilean Pavilion at la Biennale di Venezia 2010, in Venice, Italy. She believes that there is an important feedback loop between the tool and the hand. Evan's academic interests explore the intersection between architecture and medicine, particularly how architecture might be conceived as a prophylactic device.

**Michael Roden**
Adjunct Faculty; B. Arch, Philadelphia University.
Teaching Focus: Visualization and digital modeling. Rendering Manager, Francis Cauffman, Philadelphia, 2003-present. Francis Cauffman Architecture, Planning, and Interior Design specializes in the master planning and architecture of major health centers in the Philadelphia area. Over ten years' experience in digital rendering techniques and more recently utilizing rapid-prototyping and 3D printing as an architectural modeling method.

**David Schoenhard,** AIA, LEED AP
Adjunct Faculty; M.Arch.
Teaching Focus: Professional practice and management. VP at Wulff Architects. Projects include: 420 Delaware Office Building (LEED Silver) and 1045 1st Avenue Office Building for Liberty Property Trust, Two-Story Chrysler Office Building and Fit-Up, 1000 Continental Ave Office Bldg (LEED Silver), 330 Carter Road Office Complex, Four-Story Wyeth Administration Building for BPG Properties, Ltd.; 94,000 SF Corporate Headquarters for Colorcon in Harleysville, PA; 335 Commerce Three-Story Office Building for Liberty Property Trust; University of Pennsylvania, School of Nursing; Three-Story Wyeth Training Center Building for Wyeth Pharmaceutical; Lockheed Martin Office and Training Facility Renovation.

**Sara Schmidt**, AIA
Adjunct Faculty; B. Arch, Philadelphia University.
Teaching Focus: Detailing and construction documentation. Architect at PJA Architecture, a design firm that specializes in small to medium commercial projects. Ms. Schmidt regularly volunteers in construction projects for Habitat for Humanity, participates in the annual AIA Philadelphia Group Mentoring Program, and is also active with the Philadelphia Women in Architecture.

**Andrew Simmons**
Adjunct Faculty; B. Arch. Pennsylvania State University.
Teaching Focus: Visualization/Rhino, 3DS Max, SketchUp, Photoshop, Illustrator, and appropriate presentation techniques. He is currently job captain at Nelson Design, an international design and consulting firm that offers a full array of services including architecture, interior design, strategic planning, engineering, workplace and information services. Previously project designer at Francis Cauffman Architecture, 2007-2015.

**Jason Smith,** RA, LEED AP
Adjunct Faculty; B. Arch, Pennsylvania State University.
Teaching Focus: Professional management. Senior associate at Kieran Timberlake. He has led the design and construction of formative projects and contributed to the genesis of the firm's early research initiatives. He has been project manager in several educational buildings, including a Student Residential Initiative at Johns Hopkins University, Houghton Memorial Chapel and Multifaith Center at Wellesley College and Bennett Family Center at The Pennsylvania State University.

**Suzanne Singletary,** Ph.D.
Associate Professor; B.A, Fine Arts, Temple Univ.; PhD in Art History, Temple Univ.
Teaching Focus: Architectural history and theory. Teaches foundation design studies, history of architecture, and elective courses. Her research interests include interdisciplinary aspects of art, architecture, literature and music. She has participated in international symposia and been an invited speaker at the National Gallery of Washington, D.C., the National Gallery of London, the Tate Britain, the Art Institute of Chicago and the Philadelphia Museum of Art. She has published articles on Delacroix and Symbolism, Goya's paintings of cannibals and contemporary art, architecture and visual culture. A catalogue essay for the National Gallery of Ireland, Dublin on Impressionist Interiors, as well as a contribution to an anthology on Edouard Manet, were published in 2008 and 2012 respectively. Her forthcoming book, *Whistler and France,* analyzes the paintings and interiors of James McNeill Whistler relative to French art, architecture, and design.

**Edgar Stach,** RA, Germany
Professor; Dipl.-Ing., RWTH Aachen, Germany
Teaching Focus: High performance building envelopes and design. Founding director of the Univ. of Tennnesse Institute for Smart Structures (ISS), a multidisciplinary research unit focusing on building technologies and high performance building envelopes. He was the principle investigator at UTenn for the 2011 Project Living Light Solar Decathlon House. He has received two AIA design awards for design build projects and the 2008 AIA award for innovative teaching. He published over 50 scientific papers and technical publications and lectured at Universities in Europe, Asia and America.

**Sara Sweeney,** RA, CSI, CDT, LEED AP, BPI Building Analyst
Adjunct Faculty; B. Environmental Design, Miami University; M. Arch, University of California, Berkeley.
Teaching Focus: Building technology. Founder of EcoVision Green Solutions Services LLC (now part of Haley Donovan). Worked at Susan Maxman & Partners and later at Blackney Hayes Architects, where she was an Associate, Senior Level Project Architect, and Sustainable Design Coordinator. Well versed in energy efficient, durable and sustainable design solutions and the financial impacts of building green and managing the integrated design process. Currently senior associate, Haley Donovan Architecture and Site Planning specializing in affordable and sustainable residential design and site planning.

**Chris Thompson**
CABE Resource Manager; B.A. (Design Arts), Lehigh University; SME Additive Manufacturing Certification, 3DS Certified SolidWorks Associate. His skills include additive manufacturing design, production, and work flow; SolidWorks including parametric CAD; Fusion 360; Rhino including mesh repair; consumer grade 3D printing; laser cutting; vinyl printing and cutting; Quark; Corel Draw; OpenSCAD; Wordpress; online marketing; woodworking; Mac, PC, & Linux environments. He developed a technique for electropolishing intaglio printing plates and a new extrusion component for the RepRap 3D printers. Since 2011 Mr. Thompson has been a board member of Hive76, a collaborative space for makers and crafters.

**Jesse Vaughn**
Adjunct Faculty; B. Arch, Philadelphia University.
Teaching Focus: Advance modeling and visualization, 3dsMAX, Revit, Rhinoceros, and Grasshopper. He has been an adjunct faculty since 2008. Project manager at Stokes Architecture a full service architecture firm located in Philadelphia, where he is involved in all aspects of projects, from conceptual design to construction administration. Intern at Vitetta, 2008-2012; Employee Excellence Award in 2009.

## STUDENT SUPPORT SERVICES AND RESOURCES

*Academic Learning and Advising*

The Academic Success Center (now ASC, formerly the Learning & Advising Center, L&A) is the primary learning assistance resource at the University. Professional and peer tutors assist graduate and undergraduate students in all majors, to become better at learning course material and developing course skills. ASC offers content-specific tutoring in all majors, including Math, science, engineering, and business courses. They also offer learning assistance with skills such as Writing, Design, time management, presentation skills, and study strategies. Students in the M.Arch. program are advised by the Architecture Program Director and Associate Director. Advising files are maintained in a central location near the administrative assistant's office. Advisors meet with students in groups and individually, depending on students' needs and schedules. The University also instituted a new early-alert and connection system named Starfish in 2014. The program allows faculty to "flag" students who are either exceeding expectations or falling behind for various reasons. Fields for selecting larger concerns are pre-defined, and there is an opportunity for individualized feedback as well. This system has successfully connected students and their academic performance with advising such that students are made aware of their standing with a course and advisors are knowledgeable of how they can help the students succeed.

*Personal advising*

Counseling for personal concerns, including misuse or abuse of alcohol or other drugs, is available to Philadelphia University students at no charge. Counseling is provided on a short-term basis by licensed professionals who understand the special needs of college students. Referrals to area agencies and practitioners are made for those who need more specialized or long-term care. Counseling sessions are by appointment, though students are also welcome to go to Drop-In Hour (4-5pm weekdays) for a brief meeting with a counselor and to arrange for a follow-up appointment. All information shared with counselors is held in strict confidence, as long as there is no clear and imminent danger to the student or others.

*Career Guidance/Internship Placement*

The Marianne Able Career Services Center assists students and alumni with their career and professional development needs. Career Services views professional development as a process, involving both personal career-advising as well as group seminars. Career Services connects students to industry representatives, internship and job opportunities through employer networking events such as Corporate Connections and the Internship Fair (each semester) and Design Expo (each year, including portfolio reviews by industry reps); CareerLink (online database advertising job openings); Career Spotlights, (bringing industry speakers to campus to present career options); Career workshops and seminars (resume development, job search strategies, grad school prep, and others); Career assessment tests to assist with major selection and career direction; and the Career resource library and online research database (including Reference USA and Going Global).

In addition, several architectural studio sections are taught by adjunct faculty with full-time positions in Philadelphia based architectural firms, some students find formal (for academic credit) and informal (paid by employer) internships through this avenue. All informal internships are paid minimum wage or higher; the Architecture Program does not condone informal internships paying less than minimum wage. Career Services publishes an annual survey of recent graduates regarding their post-graduation plans.

**ARCHITECT LICENSING ADVISOR** (formerly IDP Coordinator)

Professor Carol Herman, AIA, is a full-time faculty member and registered architect who serves as our Architecture Licensing Advisor. Prof. Hermann remains current with Intern Development Program (IDP) requirements and professional licensing issues. She has attended past summer IDP workshops in Chicago and Portland, and most recently, the 2015 Licensing Advisors Summit in San Diego, CA. She also organizes the NCARB IDP presentations in addition to advising students on the licensure process. Students begin learning about architectural issues of health and safety (codes, standards, regulations, and accessibility) in second and third year technology and studio courses, and are regularly reminded of the licensed architect's professional and ethical responsibilities. Annual presentations by NCARB representatives have been well attended and provide students with a good overview of the professional

concerns of students and young alumni, and faculty encourage students to enroll in the IDP. Prof. Hermann remains active with AIA Philadelphia, having served as a member of the Board of Directors of the Philadelphia Chapter Director in 2013.

## I.2.2 Physical Resources

### The University

*Food Service*
Three conveniently located food service and dining options are available to students, faculty, staff, and University visitors. Through FarmSource the University kitchens source products from local farms, food production owners and artisans.

*Health and Fitness*
The Gallagher Athletic, Recreation, and Convocation Center has two regulation-size basketball courts, a state-of-the-art fitness center, aerobics studio, racquetball court and elevated jogging track. The facilities are available to all students, faulty, and staff.

*Kanbar Student Center and Philadelphia University Bookstore*
Kanbar Campus Center houses a convenience store, bookstore, mailroom, two food service areas, student lounges, recreation, and a large multi-use performance space. Student support offices (Dean of Students, Study Abroad, Career Services, etc.) are also located there. The Philadelphia University Bookstore provides students, faculty, and staff, with a wide range of products including course materials, educationally priced computer products, art, architecture, and textile supplies. The Philadelphia University Bookstore is fully owned and operated by Philadelphia University; store revenue supports university operations, campus improvements, facilities & programming.

### Architecture Program's Physical Plant

*Faculty Offices*
The Architecture Program offices (Architecture Program Director and M.Arch. Assoc. Dir.) are located in the A+D Center, which is shared with the Executive Dean, Assoc. Dean, and Interior Design Program Director; full-time architecture faculty as well as adjunct faculty offices are located in Smith House; one full-time architecture faculty member is also the Associate Dean; his office is at the A+D Center, next to the Dean's office.

*Studio and Teaching Spaces*
M.Arch. teaching spaces are located in a variety of buildings across campus. Studio and crit spaces for the M.Arch. summer foundation studios will be in the SEED Studios and Lab, as will the M.Arch. year-one studios. The M.Arch. Assoc. Dir. office may relocate to SEED in Fall 2016. Studios for M.Arch. year-two, Sustainable Design Studio will also be in the SEED Center while Design 4 will be in the newly renovated lower-level of the A+D Center. Dedicated studio spaces for B.Arch. years three through five are primarily located in the A+D Center. The SEED Center is intended as the home of the College's graduate programs in Interior Architecture, Sustainable Design, and Construction Management, the building has been used for some upper-level architecture studios and it also houses a satellite fabrication lab (see below) and computer lab, both used by graduates and undergraduates. SEED may also be used for some cross-listed B.Arch./M.Arch. courses. The University's Gutman Library is next to the A+D Center. Technology and history courses will continue to utilize classroom space shared by the University community. The architecture program, graduate and undergraduate, regularly uses seminar spaces and lecture theatres located in A+D, SEED, Gutman Library, Tuttleman Center, as well as in the Kanbar College of Design, Engineering, and Commerce Building located adjacent to the A+D and SEED Centers. Both A+D and SEED contain rotating exhibitions of student work (see section **I.1.4 Defining**

**Perspectives: HOW THE PERSPECTIVES INFORM ADDITIONAL RESOURCES TO SUPPORT STUDENT LEARNING, Design, Collaboration, and Resources to Support Student Learning.**

*Plotting and Fabrication*
Numerous large-format ink-jet plotters maintained by the University's Office of Information Resources are located in A+D and SEED.

The main fabrication facility for the College is located in the Weber Design Studios building. Students in the College also have use of the smaller CABE-operated SEED and A+D fabrication labs in addition to larger facilities run by the Kanbar College of Design, Engineering, and Commerce (similar to Weber). The recent CABE staff hire of fabrication specialist, Chris Thompson, who will manage, maintain, and train student support staff as well as oversee all fabrication facilities, will add additional expertise in cutting-edge fabrication technologies. Chris will also work closely with program faculty to help integrate analog-making and digital fabrication techniques into the the M.Arch curriculum.

CABE Fabrication Facilities Equipment Inventory:

**Weber Fabrication Center:**

| *Stationary power tools* | | *Metal tools* |
|---|---|---|
| Table saw, 10" | Disc sanders, 12", three | Foot shear, 42" |
| Jointer, 6" | Sander, comb. 1" belt x 6" disc | Bending break, 36" |
| Band saws, 14", two | Sander, 3" x 36" belt | Band saw, 6" horizontal |
| Drill presses, 16", two | Sander, spindle | Bender, rod & bar |
| Router, table | Mitre/chop saw, 12" | |
| Modelmaker table saws, 3 ½" | CNC router 48"x96" bed | |

| *Hand power tools* | | |
|---|---|---|
| Saw, 7 ½" circular | Sander, 4" belt | Heat guns, two |
| Drills, 3/8" chuck, two | Sanders, 5" disc, two | Grinder, 4" angle |
| Routers, two | Saw, jig | Biscuit jointer |

**SEED Fabrication Lab:**

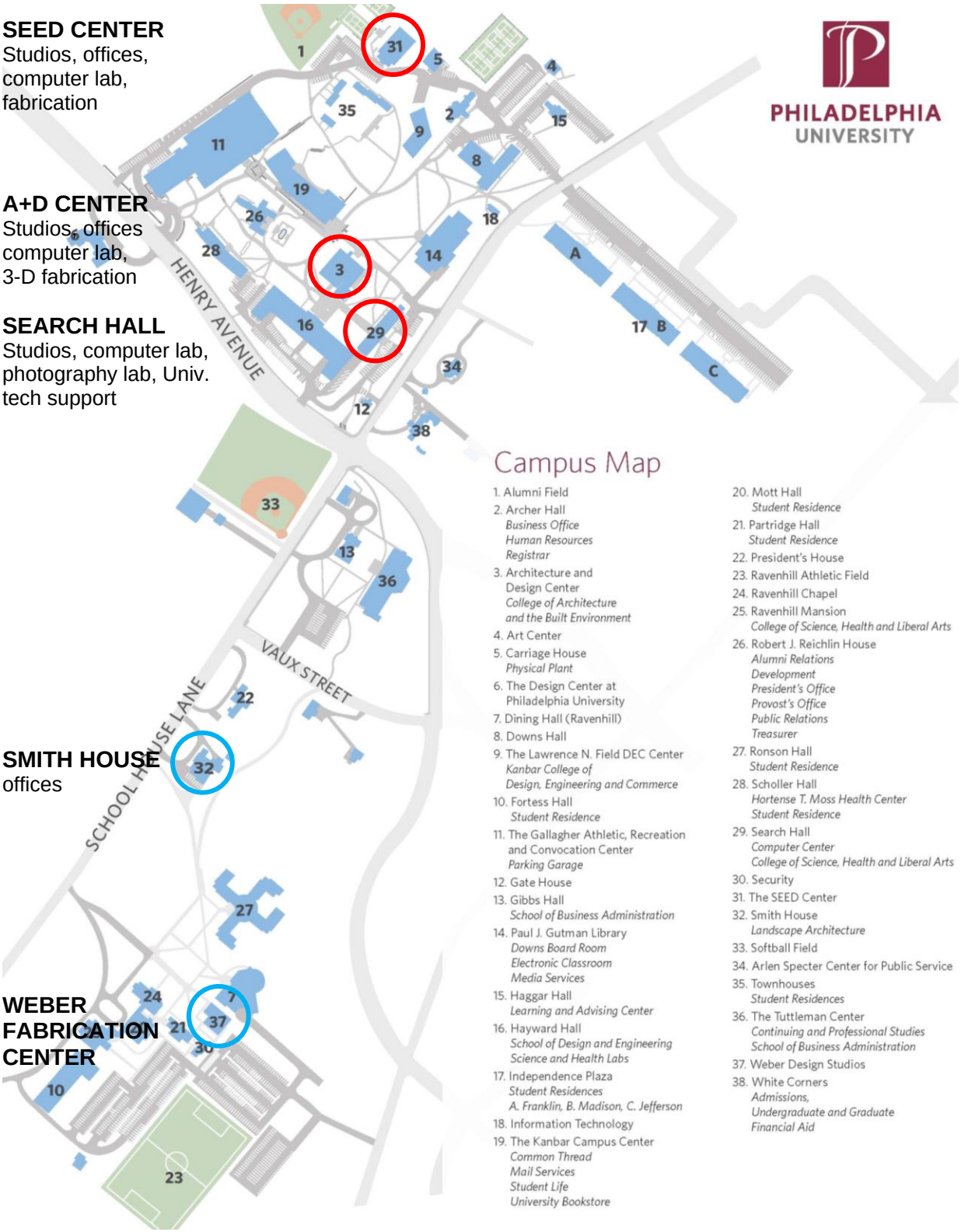
| *Power tools* | | |
|---|---|---|
| Saw, 14" band | Sander, 1" belt x 6" disc | CNC laser cutters, two |
| Saw, 7 ½" circular | Saw, jig | Router |
| Drill press, 16" | Saw, 3 ½" modelmakers | Saw, 14" chop/mitre |
| Sander, 4" belt | Sander, 12" disc | Heat gun |

**A+3-D Fabrication Lab** (located in A+D lower level)**:**
3-D Printer, two
3-D Scanner, one

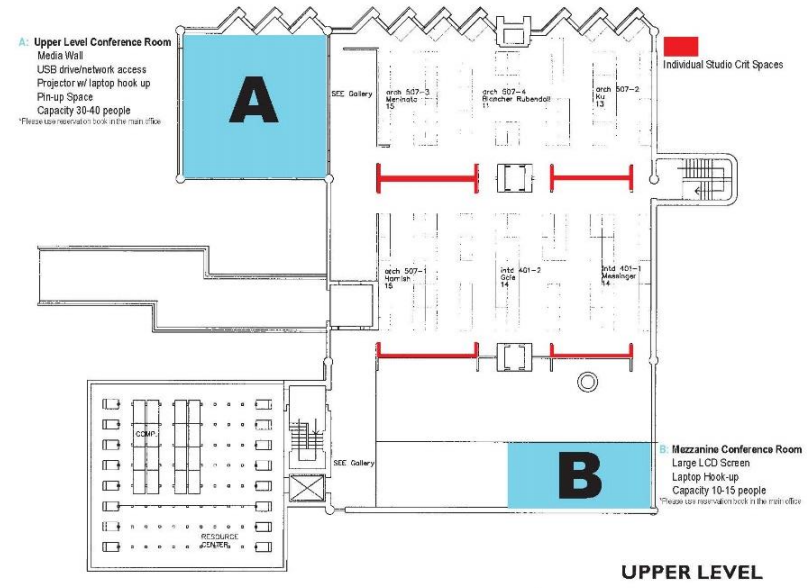
Weber and SEED Labs have a complete compliment of hand tools, clamps and other necessary aids.

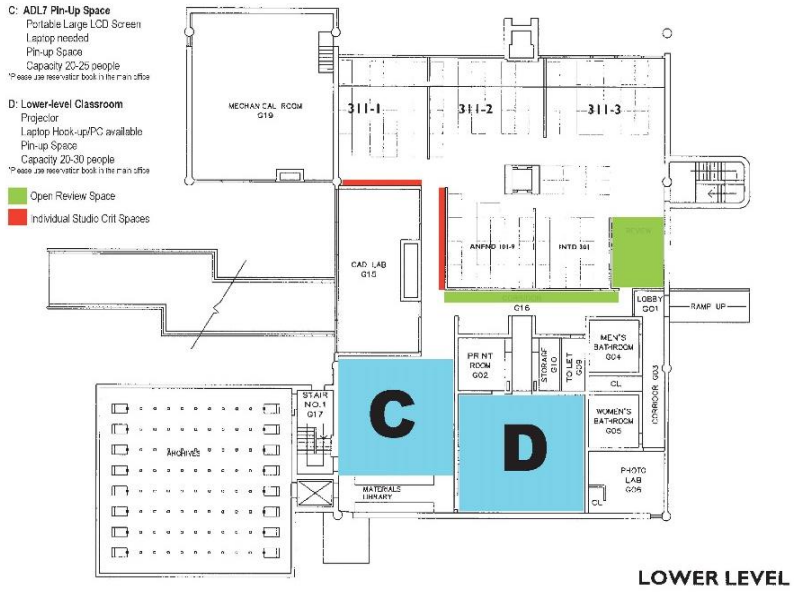
**Plans and images of the University campus and architecture program facilities listed below are found on the following pages:**

- Philadelphia University Campus
- A+D (Architecture + Design) Center
- SEED Center, Design Studios and Fabrication Lab
- Search Design Studio and Photography Lab
- Weber Fabrication Center (Weber Design Studios)



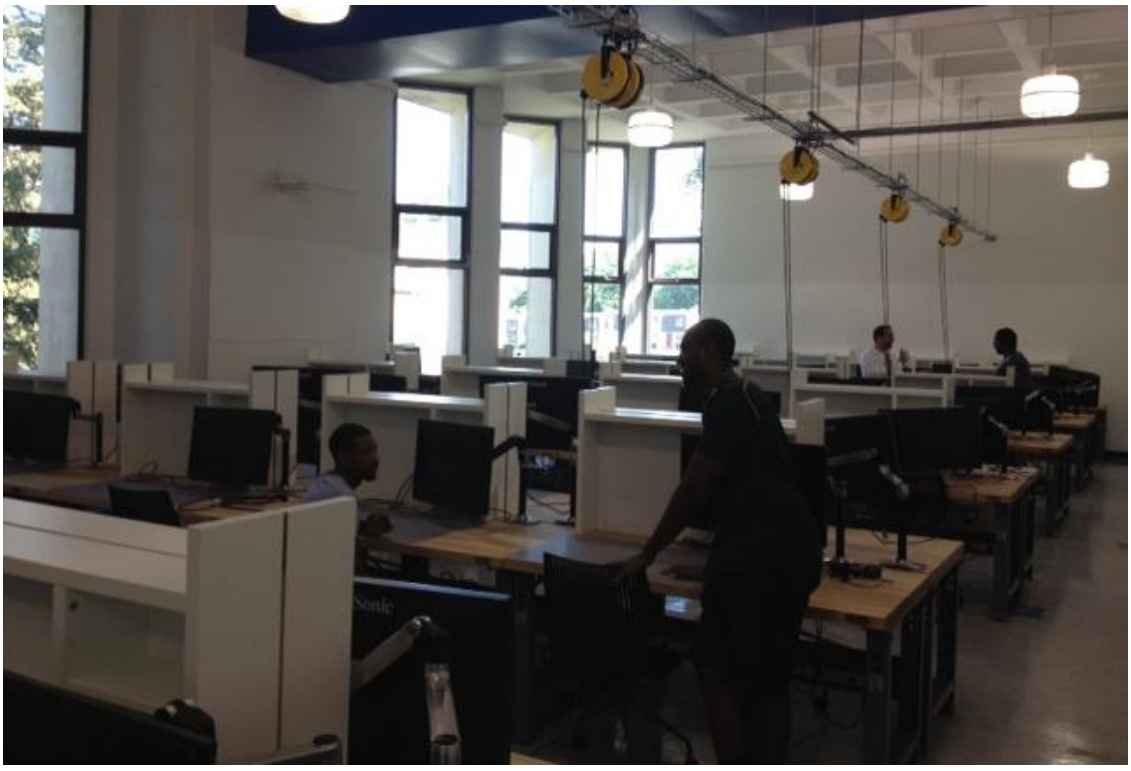

**Locations of Architecture Facilities** 2015-16




## A&D Center

• **A: Upper Level Conference Room**—Media wall, USB drive/network access, projector w/laptop hook up, pin-up space (capacity 30-40 people).
• **B: Mezzanine Conference Room—**Large LCD screen, laptop hook-up, (capacity 10-15 people).
• **C: ADL7 Pin-Up Space (Lower level)—**Portable large LCD screen, laptop needed, pin-up space (capacity 20-25 people).
• **D: Lower Level Classroom—**projector, laptop hook-up/PC available, pin-up space (capacity 20-30 people).
• **Open Review Space—**two areas available on Lower Level (see green)
• **Individual Studio Crit Spaces—**designated for specific classes (see red)



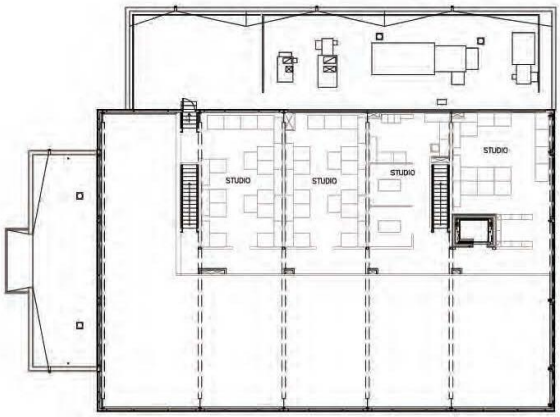
A+D Center and Studios

1 & 2: **SEED Gallery Space**
1 Large Portible LCD Screen
Laptop needed
Projector w/ laptop hook up
Pin-up Space
Capacity 20-30 people per side (60 total)
*Please contact Maryann Spencer to reserve gallery space
215.951.5947 or spencerm@philau.edu
*Work order to Help Desk is more than one LCD screen is needed
215.951.4648 or helpdesk@philau.edu
*Gallery space can accomodate 2 crits or one large crit

3: **SEED Conference Room**
1 Large LCD Screen
Laptop needed
Pin-up space
Capacity 15-20 people
*Please contact Maryann Spencer to reserve gallery space
215.951.5947 or spencerm@philau.edu

**SEED CENTER**


**GROUND FLOOR**
SCALE: 1/20" = 1'0"

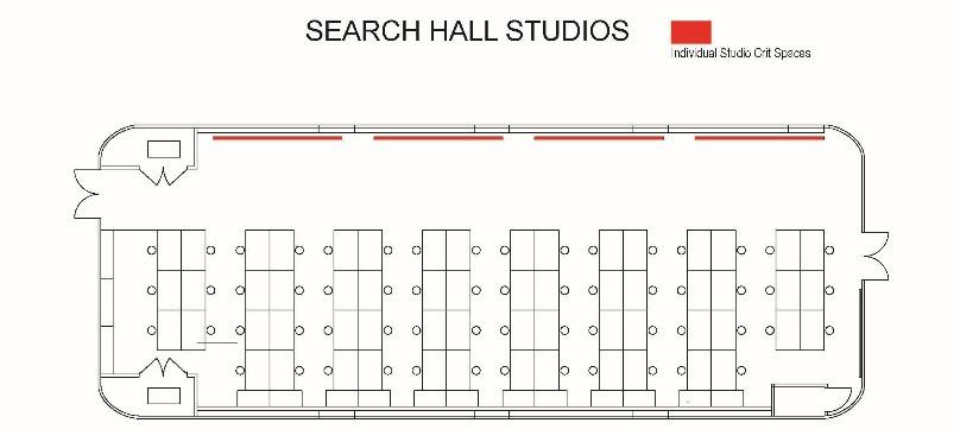



**SECOND FLOOR MEZZANINE**
SCALE: 1/20" = 1'0"

## SEED Center

• **Gallery Space (#1&2)—**One large portable LCD screen, laptop needed, projector w/laptop hook up, pin-up space (capacity 20-30 people per side; 60 total).
• **SEED Conference (#3)—**One large LCD screen, laptop needed, pin-up space (capacity 15-20 people).

SEED Center, Mezzanine Studios

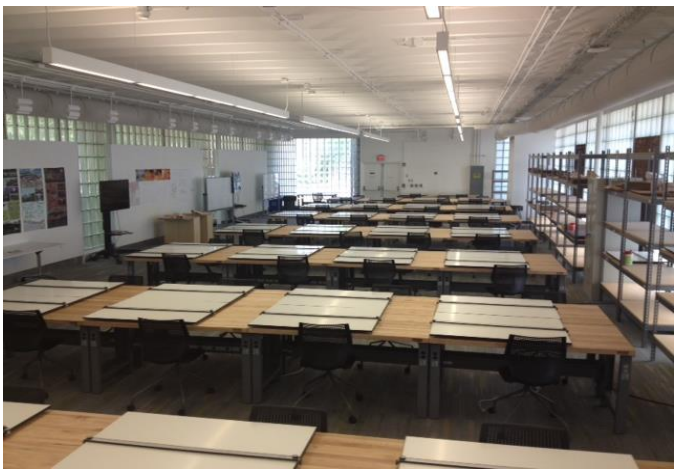



## Search Hall

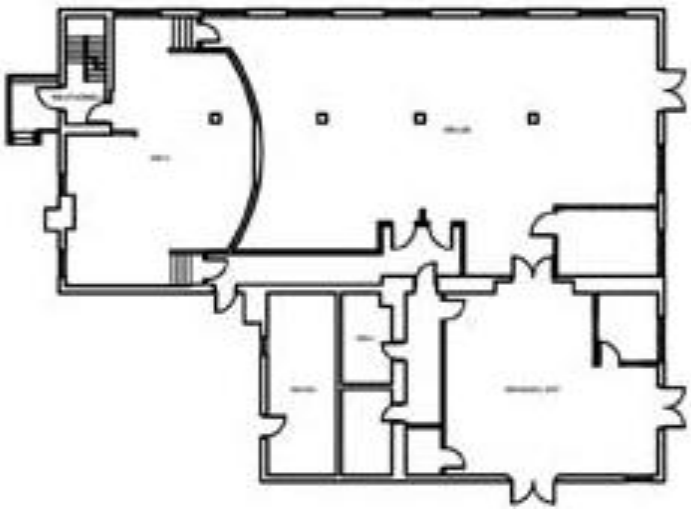
• **Individual Studio Crit Spaces—**designated for specific classes (see red)

**Smith House**

• **Room 116—**One large LCD screen, laptop needed, pin-up space (capacity 20-30 people).

Search Hall and Studios



FIRST FLOOR
A. Technical Labs/ Studios
B. Model Shop
C. Mechanical
SECOND FLOOR
D. Faculty Offices (non-Arch)
E. Review/ Critique Room
F. Storage/ Archives

## Weber Fabrication Center

Weber Fabrication Center, main assembly area

## I.2.3 Financial Resources

**Master of Architecture 5 year Financial Projections.**
For the program's launch year the program is budgeted at a break even margin. The revenue numbers have been modified to reflect our 15/16 per credit rate and adjusted by a 3% increase in future years. In the future years beyond 2015-16 the projected class sizes remain the same as what was presented in the projection model. The expenses are also from the projection model but we did modify the graduate assistantship to be consistent with our policy of awarding a 9 credit assistantship per semester. This resulted in a slight decrease to expenses. As the program develops, a more specific breakdown of the M.Arch operating budget will be available to NAAB.

**CABE Operating Budget** (undergraduate)
Because the M.Arch and B.Arch share courses and College resources, the following operating budget is included. The College of Architecture and the Built Environment's undergraduate operating budgets for 2014-15 and projected actual 2014-15 reflect the administrative structure and budget planning processes of the institution. Historically, the University budgets for administrative units, not individual majors. Therefore, the current operating budget for the undergraduate programs in CABE provides funding to support the five degree programs (B. Arch., B.S. in Arch. Studies, B.S. in Construction Management, B.S. in Interior Design, and B. Landscape Architecture) housed within this administrative unit as one group. Since the five program curricula consist of courses and facilities which overlap majors, it is difficult to extract budget allocations for individual majors. The budget figures reflect the administrative unit within which the professional Architecture Program is housed, representing a funding plan for CABE.

**Master of Architecture 5-year Projections:**

| | | Credits per Fiscal Year | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Enrollment Assumptions:** | | Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Cohort 5 | Bridge | Total |
| Number of Students | | 8 | 9 | 10 | 11 | 12 | 6 | |
| Credits per Bridge Session | 6 | | | | | | | |
| Credits per FT Cohort | 30 | | | | | | | |
| 2015/16 | | 240 | - | - | - | - | 36 | 276 |
| 2016/17 | | 240 | 270 | - | - | - | 36 | 546 |
| 2017/18 | | 240 | 270 | 300 | - | - | 36 | 846 |
| 2018/19 | | - | 270 | 300 | 330 | | 36 | 936 |
| 2019/20 | | - | - | 300 | 330 | 360 | 36 | 1,026 |

| **Fiscal Year** | **2015-16** | **2016-17** | **2017-18** | **2018-19** | **2019-20** |
|---|---|---|---|---|---|
| **Revenue** | $ 167,380 | $ 590,499 | $ 942,397 | $ 1,073,937 | $ 1,212,518 |
| Expense | $ 167,380 | $ 300,257 | $ 450,214 | $ 459,141 | $ 472,765 |
| Margin | $ - | $ 290,242 | $ 492,183 | $ 614,796 | $ 739,753 |

**College of Architecture and the Built Environment Operating Budget:**

| | Budget 2014-15 | Projected Actual 2014-15 |
|---|---|---|
| **Personnel** | | |
| | | |
| *Instruction* | | |
| Teaching (full-time) | $1,387,295 | $1,291,406 |
| Teaching (adjunct) | $598,017 | $491,007 |
| *Administration* | $316,980 | $420,793 |
| *Support Staff* | | |
| Clerical | $68,359 | $-2,453 |
| Technical Assistants | $76,102 | $61,276 |
| Student Assistants | $29,442 | $24,498 |
| | | |
| **Benefits** | | |
| | | |
| **Facilities** | | |
| | | |
| **Resources** | | |
| Supplies (office) | $3,000 | $2,908 |
| Supplies (instructional) | $16,840 | $13,467 |
| Equipment | $6,000 | $6,000 |
| Maintenance | $1,000 | $1,000 |
| Postage | $1,700 | $1,305 |
| Photocopying | $7,314 | $7,380 |
| | | |
| **Enrichment** | | |
| Travel | $2,423 | $2,981 |
| Memberships/Dues | $16,206 | $14,286 |
| Professional Development | $29,403 | $30,506 |
| Entertainment | $3,800 | $3,883 |
| Lecture Series | $8,000 | $8,982 |
| Advertising | $4,000 | $4,000 |
| Accreditation Fees | $22,000 | $22,000 |
| Model Fees | $12,000 | $11,096 |
| Course Dev./Programming | $10,549 | $9,891 |
| | | |
| **Total** | **$2,620,430** | **2,431,118** |

## I.2.4 Information Resources

**Institutional Context and Administrative Structure of the Library and Visual Resources**
Offering a wide range of library services, the Paul J. Gutman Library houses approximately 150,000 print monographic and bound journal volumes, and provides access to more than 80 online databases to support teaching, study, and research for the University community. The building is centrally located on campus, adjacent to the A+D Center and within close proximity of the SEED Center. Gutman Library staff are committed to offering services with as few barriers to access as possible. The Library Director, Karen Albert, is responsible for overseeing all operations, including supervising personnel, establishing and communicating a strategic plan, developing library services and programs, and handling the budget, as well as library collections. She reports to the Senior Associate Provost, who sits on the Provost's Council. Ms. Albert serves as an advisory member of the Academic Opportunities and Oversight curriculum committee. Five other professional librarians – including a CABE liaison – manage the technical services, website design, reference, interlibrary loan, serials, instruction, and collection development functions of the library, overseeing the paraprofessional and student workers also employed in the library. The librarian liaison to CABE also sits on the College's Education Committee as an advisory member.

**Library Collections**

The architecture monograph and journal collection is integrated within the larger Gutman Library collection, which allows students to browse other design subject areas, including interior design, color, landscape architecture, industrial design, and textile design. This arrangement reinforces the Program's goal of fostering interdisciplinary interests. The library is also developing a prototype materials collection, with the goal of expanding these physical resources, as library space becomes available thanks to online access supplanting print resources in a lot of areas.

*Monographs*

The architecture collection has been developed with guidance from the Dean and teaching faculty of CABE, who recommend titles to be added to the collection. The size and quality of the architecture collection are constantly improving to meet the needs of faculty and students in architecture programs. New courses and programs are supported with appropriate library resources after careful communication with faculty and administration charged with developing curricula. Two professional librarians keep up with new publications and select titles based on curricular needs. The Gutman Library collection is organized to facilitate easy access and full use by all library constituencies. The collection is cataloged using MARC and AACR2 national standards. Applying OCLC shared cataloging, records appear in the online catalog and Summon Discovery tool, which are accessible both on campus and remotely via the Web. Gutman Library's holdings in architecture-related materials now include approximately 33,700 monographs. Below is a breakdown of collection holdings by Dewey and LC categories.

| Dewey(LC) | Subject | Total Volumes |
|---|---|---|
| 307(HT) | City Planning | 685 |
| 333.73(HD) | Land Use | 39 |
| 333.77(HT) | Zoning | 15 |
| 343.078(TA) | Building Codes | 12 |
| 363.5(HD) | Housing | 46 |
| 363.6(SB) | Parks | 64 |
| 621.32(TH) | Lighting | 39 |
| 630-635(SB) | Plant Culture | 461 |
| 645(N) | Furnishings | 49 |
| 684(N) | Furniture | 82 |
| 690-699(TH) | Construction | 654 |
| 700-709(N) | Arts General | 3281 |
| 710-719(NA) | Landscape | 1156 |
| 720-729(NA) | Architecture | 12,497 |
| 730-739(N) | Sculpture | 688 |
| 740-749(N) | Decorative Arts | 9885 |
| 750-759(N) | Painting | 2129 |
| 760-769(N) | Graphic Arts | 457 |
| 770-779(N) | Photography | 743 |
| E-Books with Subject of Architecture | | 704 |
| **TOTAL** | | **33,686** |

A list of the Architecture monographs (print materials) is added to the library's monthly New Books web pages that is organized by subject and includes links to each book's catalog entry. CABE faculty are solicited for their purchase recommendations, and notified when their selections are added to the library's collection.

*Reference Materials, Electronic Databases/Internet Resources*

General reference books are located on the main floor of the Library. Gutman Library provides access to thousands of abstracted, indexed, and full-text journals through its collection of electronic library databases and individual journal subscriptions. These include database systems typically found in academic libraries, such as Lexis-Nexis, EBSCO's Academic Search Premier, and ProQuest. Databases are accessible both on and off campus. Gutman Library subscribes to four major architecture-related databases: Avery Index, Design & Applied Arts Index, Art Index, and JSTOR's Arts and Sciences III collection. The Library also has access to MADCAD's Building Codes database, Environment Complete (EBSCO) and the SAGE Premier journals collection, which includes architecture-related content. Library staff members also maintain research guide web pages which include links to external websites

evaluated for quality. Of particular interest to students are links about Philadelphia and its architecture. The CABE librarian liaison regularly provides instructional sessions for students in the use of these materials.

*Periodicals and Journals*
The library journals related to architecture and interior design represent a broad and comprehensive collection of trade, professional, popular, and academic publications. Current issues of all print periodicals are visibly displayed. E-journal acquisition and set-up have increased over the last few years to provide convenient, 24/7 access to important resources. Back copies of print journals are bound for preservation purposes. The journal collection is continually expanded in support of architecture-related programs. The following journal subscriptions were acquired as online-only titles: *Journal of Aesthetics and Art Criticism, Journal of Architectural Education, Journal of Architectural Engineering, Journal of Green Building, .and Journal of Interior Design.*

*Visual Media*
The visual media collection at Gutman Library consists of DVDs, videotapes, and access to digital images through a variety of databases. Excluding the digital images, the media collection consists of approximately 2600 items with an emphasis on textiles, architecture, interior design, and business. Faculty, staff, and students can sign out videos or DVDs for research or classroom use. Additional videos are available through *On Architecture*, a database of audiovisuals and complementary material documenting the main authors, works, experiences and problematics related to the field of architecture. Students, faculty and staff can access digital images through ARTstor, ARTstor's Shared Shelf, and DETAIL Inspiration. ARTstor provides access to over 1.8 million images in the arts and architecture. Shared Shelf provides access to over 23,000 images digitized from our former slide collection and objects in the library's Special Collections, representing architecture, interiors, sculpture, painting, decorative arts, tapestries/textile design, fashion, furniture, art, costume/theater, and graphic design. The collection on Shared Shelf is continually being updated and expanded with new images added by a half-time visual resources staff person and student workers. Metadata and project oversight is provided by a Gutman professional librarian. Additional images are accessible through DETAIL Inspiration, a database of downloadable projects from all DETAIL magazines of the last 10 years.

*Materials Library*
Scheduled to open in October 2015, the Materials Library at the Paul J. Gutman Library will encompass a wide range of materials used in the architecture, engineering, and design disciplines. Users will be able to browse the physical collection housed on the main floor of the library or use Artstor's Shared Shelf to search the digital catalog for items with specific attributes. Items are cataloged by composition, form, properties, process, and application, and QR codes on item labels link users to manufacturer websites. As of August 2015 over 300 items have been cataloged, and we expect this number to reach 500 by the end of 2015.

*Arlen Specter Center for Public Service*
The mission of the Arlen Specter Center for Public Service at Philadelphia University is to facilitate and promote public service and civic education through events and round-tables in a cross-disciplinary, nonpartisan setting. The work of the Center includes programming inspired by Senator Specter's long-term interests and accomplishments. Philadelphia University's Arlen Specter Collection will be made available for use by historians, students, and the general public as items are processed. Documents, memorabilia, electronic files, and audiovisual materials are in the process of being organized and preserved in collaboration with the Archives Service Center at the University of Pittsburgh. The Specter Archive consists of approximately 2,700 boxes of materials received from the Senator's Congressional Office at the Hart Building, as well as his private office, "Hideaway", next to the US Senate Chambers at the US Capitol. The collection contains personal notes, correspondence, files, memorabilia, pictures and personal possessions of the Senator collected over his career that spanned over five decades and covers a wide range of topics and areas of American history. The Collection also includes a small amount of material from his tenure as Philadelphia District Attorney and his engagement in the Warren Commission that investigated President Kennedy's assassination.

**Library Services**
Professional library staff man the Library Reference Desk approximately 63 hours per week. All these staff have experience with resources in architecture, art history, and design. A trained graduate assistant provides an additional 15 hours of Reference Desk support. A library Chat service from a link on the library's homepage is functional during the day and most evenings and weekends when the Reference Desk is staffed. Another link allows submission of questions by email, with responses usually provided the following business day. Librarian Sarah Daub, MFA, MLIS, serves as the library liaison to CABE. In this role, she is charged with collection development, reference support, and providing instructional sessions within courses, as well as overall information literacy support for the architecture curriculum.

Interlibrary Loan (ILL) gives the University community access to books and journals beyond Gutman Library. OCLC's WorldCat connects our Library to the holdings of thousands of libraries around the world. The ILLiad system allows students, faculty, and staff to place, track, and receive articles electronically. Patrons can request books without library staff intervention, from over 70 area academic libraries, using the EZborrow system. Member libraries include: University of Pennsylvania, University of Pittsburgh, Drexel University, Rutgers University, and Penn State University. Books usually arrive within three to five business days. For the last calendar year (2014), we processed 222 ILLiad interlibrary loan requests (164 articles; 58 books) from CABE students and faculty. There were additional book requests made from CABE through EZborrow, which does not total requests by college affiliation.

*Library Staff*
The Gutman Library employs 11 full time staff, two graduate assistants and approximately 25 undergraduate student workers each employed from 5 to 15 hours per week. The staff includes six professional librarians, four paraprofessional/technical staff, one full-time administrative support staff member, and one part-time visual services supervisor, and a part-time shelver/library assistant. All of the librarians provide direct reference assistance to students at the information desk. The Collection Development Librarian solicits staff and faculty recommendations and selects print resources. The professional librarians all have master's degrees from ALA-accredited institutions, as well as degrees (some at the Master's level) in other disciplines.

**Library Facilities and Equipment**
The Library is a 54,000 square foot building, with over 80 computer workstations, each equipped with an assortment of software, including applications for design and architecture students, like AutoDesk programs and the Adobe Suite. The Library has seven group study rooms, and many comfortable seating areas designed for quiet study or research. There are also scanners and printers available throughout the library for patron use. A Library Instruction Space is available on the main floor for educational sessions that support the Information Literacy (IL) mission of the Library and University. The area includes a SMARTboard, a cart housing 19 laptop computers, an instructor podium, and tables and seating for 20-25 students. The space was created to promote the principles of active learning and collaboration through hands-on class participation, and is available by reservation for library instruction sessions led by faculty or library staff.

**Library Financial Support**
Architecture resources are allocated within the general library budget, which is developed and administered by the Library Director. The first table below approximates yearly amounts spent on the Architecture and Design collection, demonstrating the growth in financial support over time, while the second summarizes library collection expenditures overall for FY13 through 15.

| Fiscal Year | A+D Book - Expenditures | No. of books | A+D Journal - Expenditures |
|---|---|---|---|
| FY13 | $24,649 | 254 | $28,519 |
| FY14 | 22,794 | 270 | 27,975 |
| FY15 | 24,680 (projected) | NA | 29,528 |

| Collection Type | Budget – FY13 | Budget – FY14 | Budget – FY15 |
|---|---|---|---|
| Books | $ 98,940 | $ 87,403 | $ 88,277 |
| Journal Subscriptions | 188,956 | 204,514 | 225,463 |
| Multimedia | 5,400 | 4,000 | 4,040 |
| Electronic Databases | 233,689 | 245,248 | 258,684 |
| **TOTAL** | **$ 526,985** | **$ 541,165** | **$ 576,464** |

Additional annual expenditures budgeted by the library for Architecture include approximately $12,000, which is 80% of the salary for the Visual Resources Supervisor.

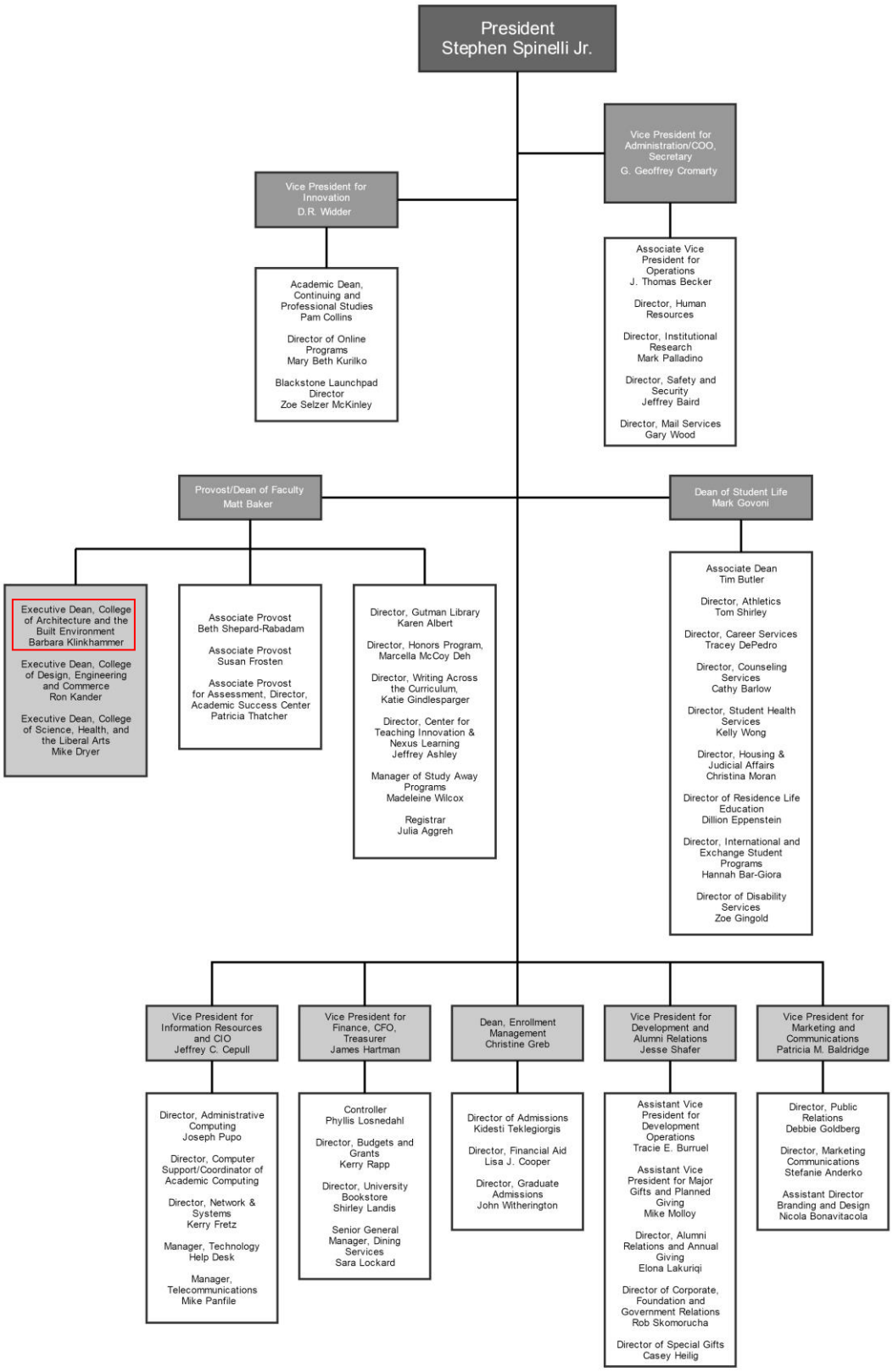
**Assessment of Library Resources and Services**
Gutman Library has made it a priority to continuously build the collection of architecture books, journals, databases, and images. Architecture books are heavily used and currently account for the majority of total book sign-outs and use, while architecture students make up only 18% of the student population. The Collection Development Coordinator and CABE librarian liaison select and order materials in response to faculty recommendations and in support of CABE curricula.

## I.2.5 Administrative Structure & Governance

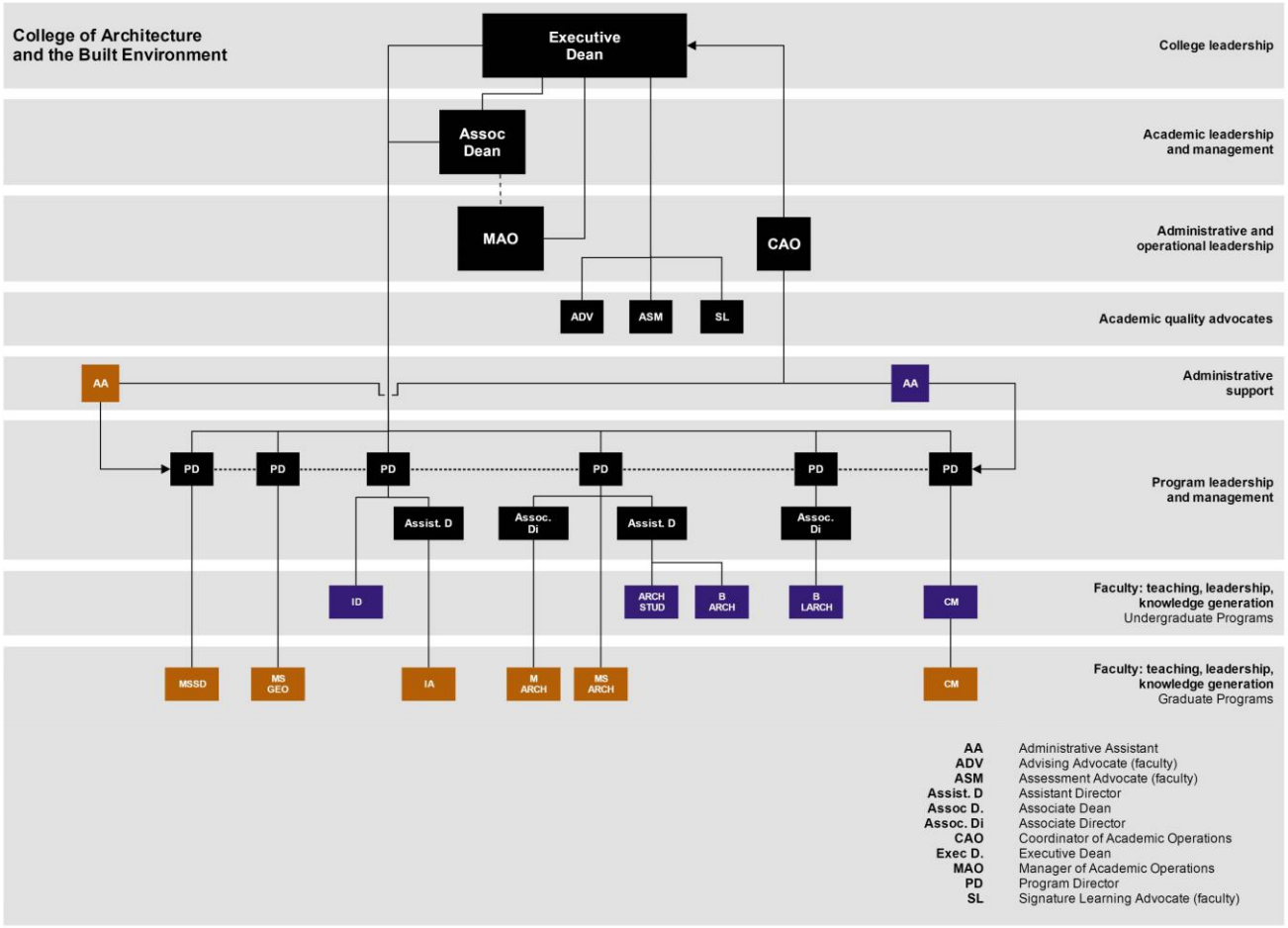
The College of Architecture and the Built Environment, in conjunction with the Kanbar College of Design, Engineering and Commerce, the College of Science, Health, and the Liberal Arts, fall under the direction of the Provost, the Chief Academic Officer of the University. The Provost and the Office of the Provost focus on supporting faculty involved in curricular change and development, research initiatives, teaching innovation and Nexus Learning. The administrators who work under the direction of the Provost; their responsibilities are listed in the *Faculty Manual* (under Academic Administration, section 1.3.2). Full-time faculty also serve as Academic Support Advocates (Nexus Learning, Assessment, and Academic Advising) to their own Colleges. The Provost reports directly to the President, the Chief Executive Officer of the University.

CABE is headed by the Executive Dean, assisted by an Associate Dean. The Executive Dean is responsible for running all aspects of the College and reports directly to the University Provost. The Associate Dean's responsibilities for the College include coordinating course and critique schedules, maintaining the website, coordinating the lecture series, work-study students, and fabrication lab staff, resolving grade disputes, and assisting with student opportunities, recruitment, managing facilities, student retention, and outreach. The Manager of Academic Operations (MAO) assists with some of these tasks to allow the Associate Dean and CABE's Program Directors to focus more time on curriculum development and assessment, student opportunities, and other program-enhancing tasks. The Coordinator of Academic Operations (CAO) is the direct assistant to the Executive Dean and along with the Assoc. Dean and MAO, oversees and coordinates all activities within the College.

The Architecture Programs are run by its Program Director, currently a tenured Full Professor. These programs include the a 5-year Bachelor of Architecture, a 4-year Bachelor of Science in Architectural Studies, a Master of Science in Architecture, and the Master of Architecture. The Assistant Director of the B.Arch. Program, is primarily responsible for course and classroom scheduling, student advising coordination, and some curricular development. The Associate Director of the M.Arch. program, currently an Associate Professor, is primarily responsible for student recruitment, curricular development, coordinating the accreditation process, as well as graduate student advising and teaching within the program. The Associate Director is also responsible for the day-to-day running of the program and reports directly to the Architecture Program Director and Executive Dean. In addition to a full-time College administrative assistant, a graduate assistant works with the Architecture Program Director and Associate Director 17 ½ hours/week to assist with curricular and accreditation tasks.




*Organizational Structure of Philadelphia University*




*Organizational Structure of the College of Architecture and the Built Environment*

The Program Director as a position distinct from the Executive and Associate Deans has the following tasks: assessing the program and implementing changes; representing the program needs to the Dean; recruiting, mentoring, and helping to assess faculty; developing the curriculum and course scheduling; completing accreditation-related activities; outreach to alumni and to the professional architectural community; and nurturing student opportunities, including scholarships.

The Associate Dean and Program Director also teach (50%), perform University service, and pursue professional development. The Associate Director of the Master of Architecture does not deal directly with the undergraduate program administrative issues, however, as an Architecture Program faculty member, is actively involved in undergraduate curriculum development and other issues that might impact the M.Arch. program. The Architecture Program Director is also assisted by an AP Advisory Board, comprised of three design professionals.

Five undergraduate programs and six graduate programs comprise the College of Architecture and the Built Environment:

*Undergraduate programs*

- Architecture [5-year B. Arch, accredited by NAAB]
- Architectural Studies [4-year B.S. Architectural Studies; concentrations in Architectural Design Technology and Historic Preservation]

- Construction Management [4-year B.S. Construction Management]
- Interior Design [4-year B.S. Interior Design, accredited by CIDA]
- Landscape Architecture [4-year B. Landscape Arch., accredited by LAAB]

*Graduate programs*

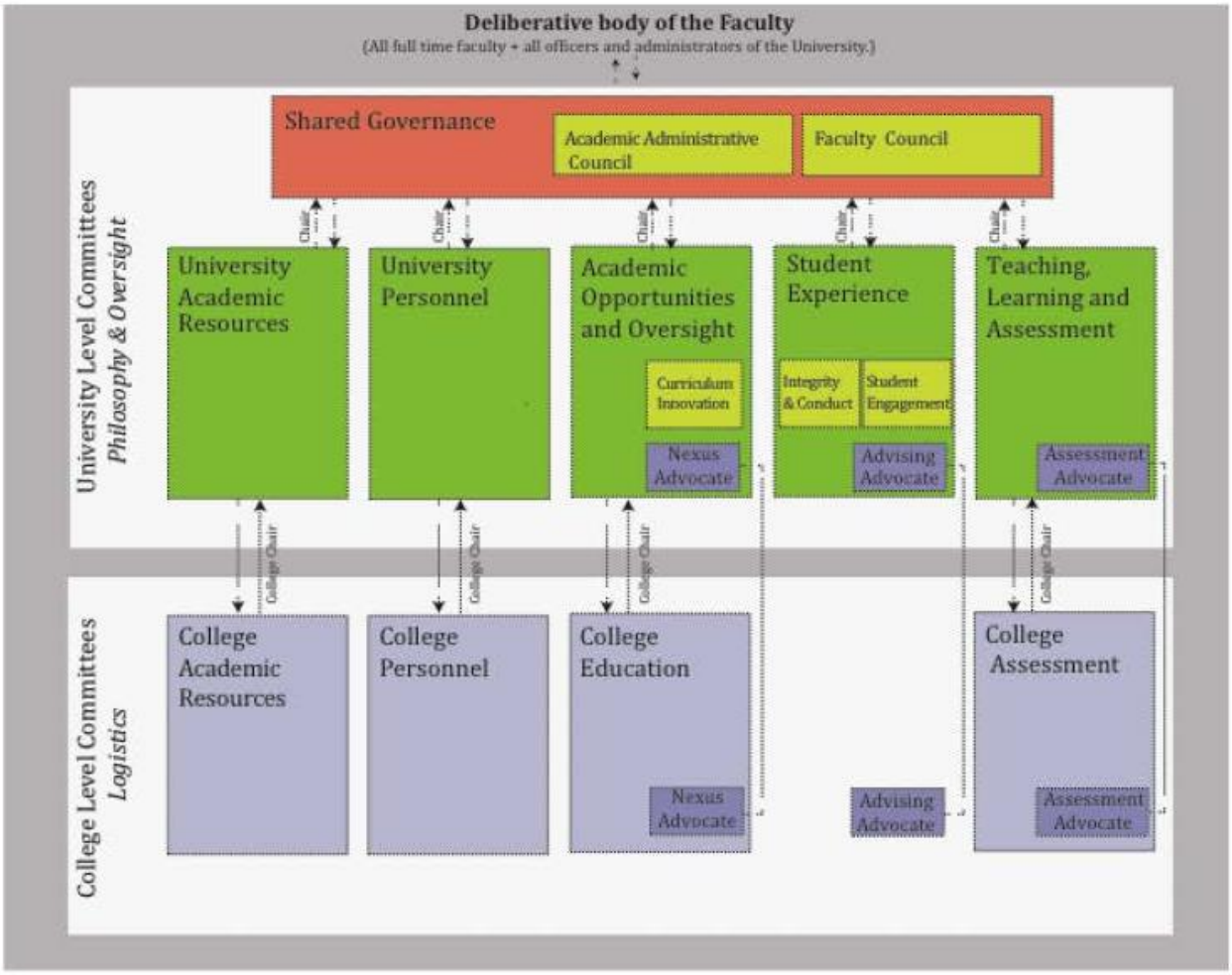
- Architecture [M. Architecture (professional degree)]
- Architecture [M.S. Architecture (post-professional degree)]
- Construction Management [M.S. Construction Management]
- GeoDesign [M.S. Geodesign]
- Interior Architecture [M.S. Interior Architecture]
- Sustainable Design [M.S. Sustainable Design]

**Opportunities for Involvement in Governance**

The University's "Organization of the Faculty" is based on the philosophy of governance presented in the AAUP *Joint Statement on Government of Colleges and Universities.* Shared governance is accomplished through joint faculty and administration service on most faculty standing committees and on the Advisory Board. Simultaneously, the work of the administration and faculty go forward through the Committee of Chairs, the President's Council, and the Provost's Council (*FM*, appendix B). Monthly faculty meetings provide a forum to disseminate relevant information and to debate current academic issues. They are run by the secretary of the faculty, who is elected by the faculty to a two-year term and may serve a maximum of two consecutive terms.

Full-time faculty are invited (indeed expected) to be involved in faculty governance by attending the monthly meetings of the University faculty and by serving on one of the standing committees. More than half the full-time faculty serve on a University standing committee. Often a faculty member is also a member of one or more school and/or program committees and university task forces. Faculty have tried to organize these responsibilities by serving on related committees. For example, one faculty member may have served as the Architecture Program representative to the College Curriculum Committee (CEC) and simultaneously as the College representative to the University's Academic Opportunities and Oversight Committee (AOOC), thus being able to follow curricular issues from the grass roots level to final University approval. Faculty also participate in monthly meetings of the College and monthly (sometimes more frequent) meetings of the Program. All full-time faculty and occasional adjunct faculty in the Architecture Programs (B.S. Architectural Studies, B.Arch., M.S. Architecture, and M.Arch.) meet together at these monthly meetings. Full-time faculty are required to attend Convocation at the onset of the academic year and Commencement at its conclusion, and typically attend at least one Open House event annually during which time they represent the Architecture Programs to prospective students and their families.

Though not required to serve, adjunct faculty are represented on some task forces. For example, the College Studio Culture Task Force included a long-standing adjunct faculty member. The standing University-level Faculty Affairs and Development Committee includes a subcommittee for adjunct faculty, charged to review and recommend revisions of policies and procedures regarding adjunct faculty compensation, working conditions, review, and other issues.




Shared governance committees research, deliberate, and make recommendations to the University administration and President concerning academic issues, policies and procedures in areas over which faculty have primary authority and significant interest. Shared governance committees also provide opportunities for faculty input concerning issues over which the administration and the Board of Trustees have primary authority. The committees also create the platform for all participants to share ideas, activities, and concerns regarding the academic life of the University so that all stakeholders (students, faculty, administration, and the Board of Trustees) in the University contribute to the University's planning process. The Board of Trustees has final responsibility for the University and so has authority to make decisions on all issues that affect the future of the institution.

*Organizational Structure of Shared Governance at Philadelphia University*

## II.1.1 Student Performance Criteria

Building on the Philadelphia University fully-accredited 5-year Bachelor of Architecture program, the Master of Architecture aims to prepare students to enter the professional world of architecture through a process that relies on increasingly independent work and iterative exercises. Students will arrive in the M.Arch. program with varying skill sets from a range of undergraduate disciplines. With two possible tracks, it is critical that students will graduate with the same pedagogical outcomes. With an emphasis on high-level sustainable design and technology skills, knowledge of project management and innovative delivery methods, and collaborative experiences in an interdisciplinary environment, the M.Arch. curriculum and courses were developed with the 2014 NAAB Student Performance Criteria (SPC) as an integral constituent to the structure of the program. Continued assessment of B.Arch. courses has resulted in measurable outcomes as well as subsequent adjustments and refinements. This has allowed us to make knowledge-based assignments of the 2014 SPC to the M.Arch. and B.Arch. simultaneously (cross-listed courses carry the same SPC). However, it must be noted that faculty responsible for course coordination in the B.Arch. and M.Arch. programs will be working together along with the architecture program directors to further fine-tune SPC in their courses during the summer of 2015. Some minor adjustments may result. The following is a summary of pedagogical objectives that align with the M.Arch. SPC:

- By the end of 1st year: fundamental architectural vocabulary and principles; developing architectural drawing and model-building skills; developing digital methods of representation; developing design-based time-management skills; understanding that design involves concept, development, and craft; basic ability to site a building and relate interior and exterior spaces; basic ability to relate architectural form, program, materiality, and structure; basic understanding of historical, cultural, and physical contexts.

- By the end of 2rd year: increased architectural vocabulary, principles, and strategies; design buildings that demonstrate sustainable strategies in their social and environmental settings; use analog and digital methods of design and representation, and as an analytical tool; basic understanding of the theoretical underpinnings of recent and contemporary practice; demonstrate an advanced understanding of many technical aspects of design; demonstrate an awareness of urban and global issues in architecture.

- By the end of 3th year: Demonstrate the ability to collaborate in teams to produce a comprehensive design for a building; show a more sophisticated tectonic approach to design, including the incorporation of BIM; demonstrate an understanding of professional practice issues including ethical issues in the exercise of professional judgment in architectural design; approach architectural design in a holistic way, in a project or research-based thesis studio.

## NAAB 2014 SPC

### **Realm A:** Critical Thinking and Representation.

Graduates from NAAB-accredited programs must be able to build abstract relationships and understand the impact of ideas based on the study and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. Graduates must also be able to use a diverse range of skills to think about and convey architectural ideas, including writing, investigating, speaking, drawing, and modeling. Student learning aspirations for this realm include:

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.

- Assessing evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

The accredited degree program must demonstrate that each graduate possesses the following:

**A.1 Professional Communication Skills:** *Ability* to write and speak effectively and use representational media appropriate for both within the profession and with the general public.

**A.2 Design Thinking Skills:** *Ability* to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

**A.3 Investigative Skills:** *Ability* to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

**A.4 Architectural Design Skills:** *Ability* to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.

**A.5 Ordering Systems:** *Ability* to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

**A.6 Use of Precedents:** *Ability* to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.

**A.7 History and Global Culture:** *Understanding* of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors.

**A.8 Cultural Diversity and Social Equity***: Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to sites, buildings, and structures.

## **Realm B:** Building Practices, Technical Skills, and Knowledge.

Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.
Student learning aspirations for this realm include:

- Creating building designs with well-integrated systems.
- Comprehending constructability.
- Integrating the principles of environmental stewardship.
- Conveying technical information accurately

The accredited degree program must demonstrate that each graduate possesses skills in the following areas:

**B.1 Pre-Design:** *Ability* to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including

relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.

**B.2 Site Design:** *Ability* to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.

**B.3. Codes and Regulations:** *Ability* to design sites, facilities, and systems that are responsive to relevant codes and regulations, and include the principles of life-safety and accessibility standards.

**B.4 Technical Documentation:** *Ability* to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

**B.5 Structural Systems:** *Ability* to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

**B.6 Environmental Systems:** *Ability* to demonstrate the principles of environmental systems' design, how design criteria can vary by geographic region, and the tools used for performance assessment. This demonstration must include active and passive heating and cooling, solar geometry, daylighting, natural ventilation, indoor air quality, solar systems, lighting systems, and acoustics.

**B.7 Building Envelope Systems and Assemblies:** *Understanding* of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

**B.8 Building Materials and Assemblies:** *Understanding* of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse.

**B.9 Building Service Systems:** *Understanding* of the basic principles and appropriate application and performance of building service systems, including lighting, mechanical, plumbing, electrical, communication, vertical transportation, security, and fire protection systems.

**B.10 Financial Considerations:** *Understanding* of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

## **Realm C:** Integrated Architectural Solutions.

Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution. Student learning aspirations for this realm include:

- Comprehending the importance of research pursuits to inform the design process.
- Evaluating options and reconciling the implications of design decisions across systems and scales.
- Synthesizing variables from diverse and complex systems into an integrated architectural solution.
- Responding to environmental stewardship goals across multiple systems for an integrated solution. The accredited degree program must demonstrate that each graduate possesses skills in the following areas:

**C.1 Research:** *Understanding* of the theoretical and applied research methodologies and practices used during the design process.

**C.2 Integrated Evaluations and Decision-Making Design Process:** *Ability* to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

**C.3 Integrative Design:** *Ability* to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

## **Realm D:** Professional Practice.

Graduates from NAAB-accredited programs must understand business principles for the practice of architecture, including management, advocacy, and the need to act legally, ethically, and critically for the good of the client, society, and the public.
Student learning aspirations for this realm include:

- Comprehending the business of architecture and construction.
- Discerning the valuable roles and key players in related disciplines.
- Understanding a professional code of ethics, as well as legal and professional responsibilities.

The accredited degree program must demonstrate that each graduate possesses skills in the following areas:

**D.1 Stakeholder Roles in Architecture:** *Understanding* of the relationships among key stakeholders in the design process—client, contractor, architect, user groups, local community—and the architect's role to reconcile stakeholder needs.

**D.2 Project Management:** *Understanding* of the methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.

**D.3 Business Practices:** *Understanding* of the basic principles of a firm's business practices, including financial management and business planning, marketing, organization, and entrepreneurship.

**D.4 Legal Responsibilities:** *Understanding* of the architect's responsibility to the public and the client as determined by regulations and legal considerations involving the practice of architecture and professional service contracts.

**D.5 Professional Conduct:** *Understanding* of the ethical issues involved in the exercise of professional judgment in architectural design and practice and understanding the role of the NCARB Rules of Conduct and the AIA Code of Ethics in defining professional conduct.

The NAAB 2014 SPC Matrix for the M.Arch. program as well as the B.Arch program are shown on the following pages:

# M.Arch NAAB SPC MATRIX

| M.Arch. Courses | Cross-listed B.Arch. Courses | 2014 NAAB Performance Criteria | REALM A: Critical Thinking and Representation | Professional Communication Skills | Design Thinking Skills | Investigative Skills | Architectural Design Skills | Ordering Systems | Use of Precedents | History and Global Culture | Cultural Diversity and Social Equity | REALM B: Building Practices, Technical Skills & Knowledge | Pre-Design | Site Design | Codes and Regulations | Technical Documentation | Structural Systems | Environmental Systems | Building Envelope Systems and Assemblies | Building Materials and Assemblies | Building Service Systems | Financial Considerations | REALM C: Integrated Architectural Solutions | Research | Integrated Evaluations and Decision-Making Design Process | Integrative Design | REALM D: Professional Practice | Stakeholder Roles in Architecture | Project Management | Business Practices | Legal Responsibilities | Professional Conduct |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | | B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 | B9 | B10 | | C1 | C2 | C3 | | D1 | D2 | D3 | D4 | D5 |
| MARCH-601 Intro to Design | | | | | | | | o | | | | | | | | | | | | | | | | | | | | | | | | |
| MARCH-602 Intro to Vis. | | | | o | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MARCH-611 Design 1 | | | | | | | o | o | o | | | | | | | | | | | | | | | | | | | | | | | |
| MARCH-612 Design 2 | | | | o | | | o | o | o | | | | | | | | | | | | | | | | | | | | | | | |
| SDN-621 Sustainable Des. Studio | | | | | | | | | | | | | | | | | | • | | | | • | | • | | | | | | | | |
| SDN-622 Sustainable Des. Studio | | | | | | | | | | | | | | | | | | • | | | | • | | • | | | | | | | | |
| MARCH-614 Design 4 | 312 | | | | | | | | | | | | | • | • | | • | • | • | • | | | | | | | | | | | | |
| MARCH-615 Design 5 | 412 | | | | • | • | | • | | • | | | • | • | • | • | • | • | • | • | • | | | | • | • | | • | | | | |
| MARCH-616 Design 6 | | | | • | • | • | | • | • | | | | • | | • | | | | | | | | | • | • | • | | | | | | |
| MARCH-621 Vis 1 | 208 | | | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MARCH-622 Vis 2 | 326 | | | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MARCH-631 History 1 | 205 | | | | | | | o | | o | o | | | | | | | | | | | | | | | | | | | | | |
| MARCH-632 History 2 | 206 | | | | | o | | | | o | | | | | | | | | | | | | | | | | | | | | | |
| MARCH-633 History 3 | 305 | | | | | • | | • | | | | | | | | | | | | | | | | | | | | | | | | |
| MARCH-634 History 4 | 306 | | | | • | | | | | | • | | | | | | | | | | | | | | | | | | | | | |
| SDN-601 Sustainable Des. Methd. | | | | | | | | | | | | | | | | | | | | | | | • | | | | | | | | | |
| SDN-623 Landscape Ecology | | | | | | | | | | | | | • | | | | | | | | | | | | | | | | | | | |
| MSARC-631 Resarch Methods | | | | | | • | | | | | | | | | | | | | | | | | | • | | | | | | | | |
| MARCH-641 Technology 1 | 210 | | | | | | | | | | | | | | | | | | | o | | | | | | | | | | | | |
| MARCH-642 Technology 2 | 212 | | | | | | | | | | | | | | | o | | o | o | o | | | | | | | | | | | | |
| MARCH-643 Technology 3 | 313 | | | | | | | | | | | | | | | | | • | | | • | • | | • | | | | | | | | |
| MARCH-644 Technology 4 | 314 | | | | | | | | • | | | | | | | | • | • | • | • | | | | | | | | • | | | | |
| MARCH-645 Technology 5 | 416 | | | | | | | | | | | | | | | • | | | • | • | • | • | | | | | | | | | | |
| MARCH-651 Structures 1 | 303 | | | | | | | | | | | | | | | | • | | | | | | | | | | | | | | | |
| MARCH-652 Structures 2 | 304 | | | | | | | | | | | | | | | | • | | | | | | | | | | | | | | | |
| MARCH-661 Professional Man. | 503 | | | | | | | | | | | | | | | | | | | | | | | | | | | • | • | • | • | • |
| | | | | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | | B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 | B9 | B10 | | C1 | C2 | C3 | | D1 | D2 | D3 | D4 | D5 |

o Expected to be met in preparatory or pre-professional de
• Conditions met in the M. Arch Prog

| **B.Arch** NAAB **SPC MATRIX** | **2014 NAAB Performance Criteria** | **REALM A: Critical Thinking and Representation** | Professional Communication Skills | Design Thinking Skills | Investigative Skills | Architectural Design Skills | Ordering Systems | Use of Precedents | History and Global Culture | Cultural Diversity and Social Equity | **REALM B: Building Practices, Technical Skills & Knowledge** | Pre-Design | Site Design | Codes and Regulations | Technical Documentation | Structural Systems | Environmental Systems | Building Envelope Systems and Assemblies | Building Materials and Assemblies | Building Service Systems | Financial Considerations | **REALM C: Integrated Architectual Solutions** | Research | Integrated Evaluations and Decision-Making Design Process | Integrative Design | **REALM D: Professional Practice** | Stakeholder Roles in Architecture | Project Management | Business Practices | Legal Responsibilities | Professional Conduct |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | | B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 | B9 | B10 | | C1 | C2 | C3 | | D1 | D2 | D3 | D4 | D5 |
| **B.Arch. Courses** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADFDN-101 Design 1 | | | | | | | ● | | | | | | | | | | | | | | | | | | | | ● | | | | |
| ARCH-102 Design 2 | | | | | ● | | ● | ● | | | | | | | | | | | | | | | | | | | ● | | | | |
| ARCH-213 Design 3 | | | ● | | | ● | | | | | | | | | | | | | | | | | | | ● | | | | | | |
| ARCH-214 Design 4 | | | | | | ● | | | | | | | ● | ● | | | ● | | | | | | | | | | | | | | |
| ARCH-311 Design 5 | | | ● | ● | ● | | | | ● | ● | | ● | | | | | | | | | | | | | | | | | | | ● |
| ARCH-312 Design 6 | | | | | | | | | | | | | ● | ● | | ● | ● | ● | ● | | | | | | | | | | | | |
| Nexus Design Experience Design 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARCH-412 Design 8 | | | | ● | ● | | ● | | ● | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | ● | ● | | ● | | | | |
| ARCH-507 Design 9 | | | ● | ● | ● | | | ● | | | | ● | ● | | | | | | | | | | | | ● | | | | | | ● |
| ARCH-508 Design 10 | | | ● | ● | ● | | | | | | | | | | | | | | | | | | | | | | | | | | ● |
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| ADFND-103 Drawing 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADFND-112 Vis. Elective | | | ● | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARCHDSN-208 Vis. 1 | | | ● | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARCH-326 Vis. 2 | | | ● | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| AHIST-205 History 1 | | | | | | | ● | | ● | ● | | | | | | | | | | | | | | | | | | | | | |
| AHIST-206 History 2 | | | | | ● | | | | ● | | | | | | | | | | | | | | | | | | | | | | |
| AHIST-305 History 3 | | | | | ● | | ● | | | | | | | | | | | | | | | | | | | | | | | | |
| AHIST-306 History 4 | | | | ● | | | | | | ● | | | | | | | | | | | | | | | | | | | | | |
| ARCH-371 Design Theory OP | | | ● | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARCHDSN-210 Technology 1 | | | | | | | | | | | | | | | | | | | ● | | | | | | | | | | | | |
| ARCH-212 Technology 2 | | | | | | | | | | | | | | | ● | | ● | ● | ● | | | | | | | | | | | | |
| ARCH-313 Technology 3 | | | | | | | | | | | | | | | | | ● | | | ● | ● | | ● | | | | | | | | |
| ARCH-314 Technology 4 | | | | | | | | ● | | | | | | | | ● | ● | ● | ● | | | | | | | | ● | | | | |
| ARCH-416 Technology 5 | | | | | | | | | | | | | | | ● | | | ● | ● | ● | ● | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARCH-303 Structures 1 | | | | | | | | | | | | | | | | ● | | | | | | | | | | | | | | | |
| ARCH-304 Structures 2 | | | | | | | | | | | | | | | | ● | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARCH-503 Professional Mgmt. | | | | | | | | | | | | | | | | | | | | | | | | | | | ● | ● | ● | ● | ● |
| | | | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | | B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 | B9 | B10 | | C1 | C2 | C3 | | D1 | D2 | D3 | D4 | D5 |

**Realm C: Pedagogy and Methodology for Integrated Architectural Solutions**

Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution. Student learning aspirations for this realm include:

- Comprehending the importance of research pursuits to inform the design process.
- Evaluating options and reconciling the implications of design decisions across systems and scales.
- Synthesizing variables from diverse and complex systems into an integrated architectural solution.
- Responding to environmental stewardship goals across multiple systems for an integrated solution. The accredited degree program must demonstrate that each graduate possesses skills in the following areas:

The M.Arch Design 5 comprehensive studio course demands that students work in teams integrating constructional structural and environmental systems in the design and documentation of a large and complex building. Students research building types and systems precedents and their resulting impact on built form, analyze material properties, specify component building systems and apply codes and standards to fulfill technical, programmatic and aesthetic needs. The studio also explores and examines the integration of systems of varying scales with a building in an urban context. Site and program are explored as temporal forces that influence design concept, natural and artificial lighting, passive and active heating and cooling systems, structure and issues of enclosure, materiality and skin. Students will design these systems as integral components to the architecture and ecological performance of the building. Notions of what makes a ‘‘sustainable’’ architecture and building technology are foci of the course. Design and technology investigations are collaborative, while research and precedent application are undertaken by group as well as individually.

**Methods for Assessing Student Work**

The architecture program director and faculty review student work on an ongoing basis, by attending mid-term and final critiques in studio courses, seminars, etc. Faculty collect studio work as well as assignments and exams in other classes for assessment and for archival preservation in preparation for NAAB accreditation visits.

Scoring rubrics are used in all architecture studio courses or in courses where performance expectations may not be explicitly or easily understood by students. Faculty work together and with the architecture program director along with the College faculty Assessment Advocate, to help develop criteria for course and project rubrics. Rubrics are constantly being revised, refined, and updated to reflect changes in the curriculum, course assignments, and NAAB SPC. Rubrics not only help with student test, project and assignment and evaluations, but the results more easily allow for comparison between individual course sections and the varying pedagogical strategies employed by faculty.

An example of a scoring rubric used in Arch 312 Design 6 (MARCH-614 Design 4) is found on the following page:

| | Formative (D/F) | Developing (C) | Accomplished (B) | Exemplary (A) |
|---|---|---|---|---|
| **DESIGN**<br>Quality, creativity & functionality<br>WEIGHT: 25%<br><br>GRADE: | 1. Illustrates little creativity<br>2. Little translation to 3d development.<br>3. Design does not promote optimal functionality or access.<br>**4. Professional practice has not been evident. There are multiple areas that do not meet public, health, safety and welfare regulations (including those for individuals with physical, sensory, and cognitive disabilities).**<br>5. Pre-design research is only somewhat evident in final design.<br>6. Project shows limited degree of appreciation of human needs and social responsibilities. | 1. Design exhibits creativity in some areas but less in others.<br>2. Design has some development of 2D & 3D but improvement could be made.<br>3. Function and access are marginal.<br>**4. Professional practice has been somewhat evident through the application of most public, health, safety and welfare regulations. However, there is at least one area that does not meet the requirements (including those for individuals with physical, sensory, and cognitive disabilities).**<br>5. Design could be improved by applying more facts collected during pre-design research<br>6. Project shows some degree of appreciation of human needs and social responsibilities. | 1. Design exhibits a reasonable degree of creativity.<br>2. Design is clear in both 2D & 3D development.<br>3. Function and access are satisfactory.<br>**4. Professional practice has been evident through a reasonable application of all public, health, safety and welfare regulations (including those for individuals with physical, sensory, and cognitive disabilities).**<br>5. Design is reasonably informed by pre-design research.<br>6. Project shows clear appreciation of human needs and social responsibilities. | 1. Design exhibits a high degree of creativity.<br>2. Design is exceptional in both 2D and 3D development.<br>3. Function and access have been optimally achieved.<br>**4. Professional practice has been evident through the successful and creative application of all public health, safety and welfare regulations (including those for individuals with physical, sensory, and cognitive disabilities).**<br>5. Design clearly demonstrates an excellent incorporation of facts collected in pre-design research<br>6. Project shows a thorough appreciation of human needs and social responsibilities. |
| **SUSTAIN-ABILITY**<br>WEIGHT: 10%<br><br>GRADE: | **1. Project showed less than acceptable awareness towards environmental issues.**<br>**2. Project demonstrated inadequate understanding of environmental/sustainable design issues and their integration into built environments.**<br>**3. Project lacked reasonable evidence of sustainable energy usage strategies (including daylighting, natural ventilation, efficient artificial lighting usage, etc.).** | **1. Project showed some awareness towards environmental issues.**<br>**2. Project demonstrated some understanding of environmental/sustainable design issues and their integration into built environments.**<br>**3. Project showed some evidence of sustainable energy usage strategies (including daylighting, natural ventilation, efficient artificial lighting usage, etc.).** | **1. Project showed reasonable awareness and innovation towards environmental issues.**<br>**2. Project demonstrated a basic understanding of environmental/ sustainable design issues and their integration into built environments.**<br>**3. Project showed reasonable evidence of sustainable energy usage strategies (including daylighting, natural ventilation, efficient artificial lighting usage, etc.).** | **1. Project showed mature awareness and innovative approach to environmental issues.**<br>**2. Project demonstrated an exceptional understanding of environmental / sustainable design issues and their integration into built environments.**<br>**3. Project showed exceptional evidence of sustainable energy usage strategies (including daylighting, natural ventilation, efficient artificial lighting usage, etc.).** |

| | Formative (D/F) | Developing (C) | Accomplished (B) | Exemplary (A) |
|---|---|---|---|---|
| **DESIGN**<br>Quality, creativity & functionality<br>WEIGHT: 25%<br><br>GRADE: | 1. Illustrates little creativity<br>2. Little translation to 3d development.<br>3. Design does not promote optimal functionality or access.<br>**4. Professional practice has not been evident. There are multiple areas that do not meet public, health, safety and welfare regulations (including those for individuals with physical, sensory, and cognitive disabilities).**<br>5. Pre-design research is only somewhat evident in final design.<br>6. Project shows limited degree of appreciation of human needs and social responsibilities. | 1. Design exhibits creativity in some areas but less in others.<br>2. Design has some development of 2D & 3D but improvement could be made.<br>3. Function and access are marginal.<br>**4. Professional practice has been somewhat evident through the application of most public, health, safety and welfare regulations. However, there is at least one area that does not meet the requirements (including those for individuals with physical, sensory, and cognitive disabilities).**<br>5. Design could be improved by applying more facts collected during pre-design research<br>6. Project shows some degree of appreciation of human needs and social responsibilities. | 1. Design exhibits a reasonable degree of creativity.<br>2. Design is clear in both 2D & 3D development.<br>3. Function and access are satisfactory.<br>**4. Professional practice has been evident through a reasonable application of all public, health, safety and welfare regulations (including those for individuals with physical, sensory, and cognitive disabilities).**<br>5. Design is reasonably informed by pre-design research.<br>6. Project shows clear appreciation of human needs and social responsibilities. | 1. Design exhibits a high degree of creativity.<br>2. Design is exceptional in both 2D and 3D development.<br>3. Function and access have been optimally achieved.<br>**4. Professional practice has been evident through the successful and creative application of all public health, safety and welfare regulations (including those for individuals with physical, sensory, and cognitive disabilities).**<br>5. Design clearly demonstrates an excellent incorporation of facts collected in pre-design research<br>6. Project shows a thorough appreciation of human needs and social responsibilities. |
| **SUSTAIN-ABILITY**<br>WEIGHT: 10%<br><br>GRADE: | **1. Project showed less than acceptable awareness towards environmental issues.**<br>**2. Project demonstrated inadequate understanding of environmental/sustainable design issues and their integration into built environments.**<br>**3. Project lacked reasonable evidence of sustainable energy usage strategies (including daylighting, natural ventilation, efficient artificial lighting usage, etc.).** | **1. Project showed some awareness towards environmental issues.**<br>**2. Project demonstrated some understanding of environmental/sustainable design issues and their integration into built environments.**<br>**3. Project showed some evidence of sustainable energy usage strategies (including daylighting, natural ventilation, efficient artificial lighting usage, etc.).** | **1. Project showed reasonable awareness and innovation towards environmental issues.**<br>**2. Project demonstrated a basic understanding of environmental/ sustainable design issues and their integration into built environments.**<br>**3. Project showed reasonable evidence of sustainable energy usage strategies (including daylighting, natural ventilation, efficient artificial lighting usage, etc.).** | **1. Project showed mature awareness and innovative approach to environmental issues.**<br>**2. Project demonstrated an exceptional understanding of environmental / sustainable design issues and their integration into built environments.**<br>**3. Project showed exceptional evidence of sustainable energy usage strategies (including daylighting, natural ventilation, efficient artificial lighting usage, etc.).** |

| | Formative (D/F) | Developing (C) | Accomplished (B) | Exemplary (A) |
|---|---|---|---|---|
| **TECTONICS, MATERIALITY, EXTERIOR ENVELOPE**<br>WEIGHT: 15%<br><br>GRADE: | 1. Project shows limited understanding of materiality.<br>2. Students demonstrate an inadequate understanding of at least one of the following: building envelope systems, the basic principles involved in their appropriate application the associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and/or energy and material resources.<br>3. Students lack sufficient understanding in at least one of the following areas: building materials, assemblies and/or assembly details. | 1. Project shows some understanding of materiality.<br>2. Students demonstrate some understanding of building envelope systems and the basic principles involved in their appropriate application, and the associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.<br>3. Students demonstrate some understanding of building materials, assemblies and assembly details. | 1. Projects shows reasonable understanding of materiality with some degree of innovation.<br>2. Students demonstrate an acceptable understanding of building envelope systems and the basic principles involved in their appropriate application, and the associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.<br>3. Students demonstrate a basic understanding of building materials, assemblies and assembly details. | 1 Project shows an elegant understanding of materiality with maximum innovation and possibility.<br>2 Students demonstrate an exceptional understanding of building envelope systems and the advanced principles involved in their appropriate application, and the associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.<br>3 Students demonstrate a thorough understanding of building materials and assemblies, and assembly details. |
| **PRESENTA-TION QUALITY**<br>Clarity, rendering & model<br>WEIGHT: 15%<br><br>GRADE: | 1. Presentation is disorganized<br>2. Line weights are too dark or light.<br>3. Text in many locations is too large or small.<br>4. Graphics or background are distracting and takes away from drawings.<br>5. Rendering is too dark or muddy. | 1. Presentation is somewhat organized but some areas are difficult to read.<br>2. Line weights could use improvement in some areas.<br>3. Text in some areas is too large or small.<br>4. Graphics could use improvement<br>5. Rendering quality is inconsistent. | 1. Presentation is organized to an acceptable degree.<br>2. Line weights are clear & varied<br>3. Text is used appropriately<br>4. Graphics are appropriate to presentation.<br>5. Rendering is of good quality<br>6. Model is adequate to explain the scale & 3D design of the project. | 1. Presentation is organized and especially appealing in graphic quality.<br>2. Line weights are exceptional.<br>3. Text is used to a degree that adds quality to the boards.<br>4. Graphics add to the drawings & presentation.<br>5. Rendering is excellent in quality. |
| **LEVEL OF COMPLETION**<br>WEIGHT: 10%<br><br>GRADE: | 1. Several required deliverables are not met and/or are not completed at an acceptable quality.<br>2. Model is incomplete.<br>3. Material and furniture specifications are very incomplete or missing.<br>4. Human figures are not shown in all drawings as required. | 1. A majority of the requirements are met although a few are missing or several are not completed at an acceptable quality.<br>2. Model is adequate but it could stand improvement in communicating the design intentions.<br>3. Materials are not labeled to coordinate with specs.<br>4. Human figures are shown inconsistently in drawings and/or they are distracting or not to scale. | 1. Most requirements are met although a few are not completed at an acceptable quality.<br>2. Model is adequate to explain the scale & 3D design of the project.<br>3. Materials are labeled<br>4. Human figures are shown in drawings as required. | 1. All requirements are met and completed at a very high level.<br>2. Model is exceptional in explaining. the scale & 3D design of the project<br>3. Materials are labeled in an easily identifiable manner.<br>4. Human figures are shown in drawings to indicate scale. These do not distract from the quality of the drawing and add to the graphic presentation. |

| | Formative (D/F) | Developing (C) | Accomplished (B) | Exemplary (A) |
|---|---|---|---|---|
| **VERBAL PRESENTATION**<br>WEIGHT: 5%<br><br>GRADE: | 1. Presentation was rushed and/or seemed unplanned.<br>2. Overuses informal language and/or overuse of' like, ummm", etc.<br>3. Eye contact was not present<br>4. Acceptance of feedback was not evident.<br>5. Dialog was extremely unbalanced between team members. | 1. Presentation seemed somewhat planned although more preparation could be had<br>2. Language used was sometimes informal or occasionally used "like, ummm, etc."<br>3. Eye contact was sporadic<br>4. Students were uneven with acceptance of feedback from jurors.<br>5. Dialog was somewhat unbalanced between team members. | 1. Presentation was adequately prepared.<br>2. Language used was mostly professional.<br>3. Eye contact was acceptable.<br>4. Students interacted well with jurors.<br>5. Dialog was dived equally between team members. | 1. Presentation was extremely well prepared.<br>2. Language used was professional and appropriate.<br>3. Eye contact was exceptional.<br>4. Students interacted well with jurors and accepted feedback graciously and/or defended their design appropriately.<br>5. Dialog was divided between team members in a balanced manner that added to the overall presentation. |
| **Overall Comments** | | | | |

## II.2.1Institutional Accreditation

CHE MSA **MIDDLE STATES COMMISSION ON HIGHER EDUCATION**
3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501
www.msche.org

### STATEMENT OF ACCREDITATION STATUS

**PHILADELPHIA UNIVERSITY**
**School House Lane & Henry Avenue**
**Philadelphia, PA 19144**
**Phone: (215) 951-2700; Fax: (215) 951-2569**
**www.philau.edu**

**Chief Executive Officer:** Dr. Stephen Spinelli, Jr, President

### INSTITUTIONAL INFORMATION

**Enrollment (Headcount):** 2811 Undergraduate; 712 Graduate

**Control:** Private (Non-Profit)

**Affiliation:** None

**Carnegie Classification:** Master's - Larger Programs

**Approved Degree Levels:** Associate's, Bachelor's, Postbaccalaureate Certificate, Master's (MBA specialized in Textile and Apparel Marketing (online)), Post-Master's Certificate, Doctor's - Professional Practice (Doctor of Occupational Therapy), Doctor's - Research/Scholarship (PhD in Textile Engineering and Science);

**Distance Education Programs:** Fully Approved

**Accreditors Recognized by U.S. Secretary of Education:** Accreditation Commission for Midwifery Education; American Occupational Therapy Association, Accreditation Council for Occupational Therapy Education; National Association of Schools of Art and Design, Commission on Accreditation

**Other Accreditors:** National Architectural Accrediting Board; Council for Interior Design Accreditation; Accreditation Board for Engineering and Technology; Landscape Architecture Accreditation Board; Accreditation Review Commission on Education for the Physician Assistant; American Chemical Society;

#### Instructional Locations

**Branch Campuses:** None

**Additional Locations:** Bucks County Campus, Trevose, PA

**Other Instructional Sites:** None

### ACCREDITATION INFORMATION

**Status:** Member since 1955

**Last Reaffirmed:** November 17, 2011

For more information, see also: http://www.philau.edu/about/middlestates/

## II.2.2 Professional Degrees & Curriculum

The M.Arch. program is designed as a 48 to 100 semester-credit curriculum and can be completed in two to three academic years. These credits are in addition to 120 semester-credits applied to a baccalaureate degree. Advanced placement depends on previous education and experience. The curriculum consists of:

- (24) credits of new courses specifically for the new program
- (9-10) credits of new courses shared with other grad programs (CABE grad core)
- (54) credits of existing courses shared with undergrad programs (below 500-level courses)
- (10-12) credits of electives, which would be shared by grad or undergrad programs, depending on which courses the student chooses. (The M.Arch. program would encourage students to take elective courses in other CABE graduate programs: MS Architecture/High Performance Building; MS GeoDesign; MS Sustainable Design; MS Construction Management; MS Interior Architecture.)

The program takes two forms:

*Preprofessional-plus:*
Candidates for this degree have completed at least 168 semester credit hours, or the quarter-hour equivalent, of which at least 30 credit hours are taken at the graduate level, and hold a pre-professional degree in architecture or a related field before admission to the graduate degree program. The graduate-level academic course work must include professional studies and optional studies.

*Non-preprofessional degree-plus:*
Candidates for this degree have completed at least 168 semester credit hours, or the quarter-hour equivalent, of which at least 30 credit hours are taken at the graduate level, and hold an undergraduate degree from a regionally accredited institution before admission to the graduate degree program. The graduate-level academic

The curriculum map shown on the following page represents the curriculum in its entirety and shows the sequence of courses. Course descriptions/outlines are found in **SECTION 4 Supplemental Material: i. Descriptions of all courses Offered in the Curriculum.**

NOTE: This table lists semester-credit minimum requirements. Programs that operate on the quarter system must multiply these totals by 1.5 to identify the minimum credit requirements for their programs.

| | B. Arch. | M. Arch. (SI) | M. Arch. (preprofessional plus) | M. Arch. (non-preprofessional plus) | D. Arch. |
|---|---|---|---|---|---|
| **General Studies** | 45 credits | 45 credits | Defined by baccalaureate required for admission | Defined by baccalaureate required for admission | Defined by baccalaureate required for admission |
| **Optional Studies** | 10 | 10 | 10 | 10 | 10 |
| **Professional Studies** | As defined by the program | As defined by the program | As defined by the program | As defined by the program | As defined by the program |
| **Undergraduate Credits** | 150 | As defined by the program | As defined by the program | As defined by the program | 120 |
| **Graduate Credits** | 0 | 30 | 30 | 30 | 90 |
| **Total Credits** | 150 | 168 | 168 | 168 | 210 |

PHILADELPHIA UNIVERSITY | COLLEGE OF ARCHITECTURE + THE BUILT ENVIRONMENT

# MASTER OF ARCHITECTURE

3.5 YEAR CURRICULUM 2014-2015

| CURRICULAR SEQUENCE | SUMMER | YEAR 1 | | YEAR 2 | | YEAR 3 | | |
|---|---|---|---|---|---|---|---|---|
| DESIGN + REPRESENTATION | **MARCH-601** INTRO TO DESIGN 3CR | **MARCH-611** DESIGN 1 6CR | **MARCH-612** DESIGN 2 6CR | **SDN-621** [sp] or **622** [fall] SUST. DSN STUDIO **4CR** | **MARCH-614** DESIGN 4 Tectonics **6CR** | **MARCH-615** DESIGN 5 Compre-hensive **6CR** | **MARCH-616** DESIGN 6 THESIS **6CR** | |
| | **MARCH-602** INTRO TO VISUALIZATION 3CR | **MARCH-621** VIS 1 RHINO + AUTOCAD 3CR | | | **MARCH-622** VIS 2 ADVANCED MODELING **3CR** | | | |
| HISTORY + THEORY | | **MARCH-631** HISTORY 1 ANCIENT TO MEDIEVAL 3CR | **MARCH-632** HISTORY 2 RENAISSANCE-BAROQUE 3CR | **MARCH-633** HISTORY 3 EARLY MODERN 3CR | **MARCH-634** HISTORY 4 CONTEM-PORARY 3CR | **MSARC-631** RESEARCH METHODS **3CR** | | |
| TECHNOLOGY + STRUCTURES | | | **MARCH-651** STRUCTURES 1 LINEAR FORCES 3CR | **MARCH-652** STRUCTURES 2 COLS/BEAMS 3CR | | | | |
| | | **MARCH-641** TECH 1 MATERIALS + METHODS 3CR | **MARCH-642** TECH 2 PASS SYS + BLDG ENV 3CR | **MARCH-643** TECH 3 DYNAMIC SYSTEMS 3CR | **MARCH-644** TECH 4 APPLIED SYSTEMS 3CR | **MARCH-645** TECH 5 REVIT + CDS **3CR** | | |
| PROFESSIONAL PRACTICE | | | | | | | MARCH-661 PROFESSIONAL MANAGEMENT **3CR** | |
| ELECTIVES | | | | **SDN-601** SUSTAINABLE DESIGN METHO. **3CR** | ELECTIVE **3CR** | ELECTIVE **3CR** | ELECTIVE **3CR** | |
| | | | | [ or ] **SDN-623** LANDSCAPE ECOLOGY SEMINAR. **2CR** | | | ELECTIVE **3CR** | |
| TOTAL | 6 | 15 | 15 | 15-16 | 18 | 15 | 15 | 48-100 |

NEW M ARCH COURSES
EXISTING MSSD / MS ARCH COURSES
EXISTING B ARCH COURSES

**Bolded Credits**: 48 Credits minimum for students with advanced standing

## MASTER OF ARCHITECTURE

FORMAL STUDY PLAN

Name _____ Date _____

Address _____ Phone _____

_____ Student ID# _____

**Current Academic Program** _____

**Undergradaute Information**

Degree Held _____ Institution _____

Date Granted _____ Major _____

**Graduate Admission** Conditional Acceptence Yes No

Semester Admitted to PhilaU

Semester First Work Completed at PhilaU

Last Semester of 7 year Limit for Degree

**Study Plan** (list transfer courses in Part A, PhilaU courses in Part B)

| Courses Waived | | Complete | Semester Taken | Credits | Grade |
|---|---|---|---|---|---|
| | MARCH-601 Introduction to Design | | | | |
| | MARCH-611 Design 1 | | | | |
| | MARCH-612 Design 2 | | | | |
| | SDN-622 Sustainable Design Studio | | | | |
| | MARCH-614 Design 4 | | | | |
| | MARCH-615 Design 5 | | | | |
| | MARCH-Design 6 | | | | |
| | MARCH-621 Visualization 1 | | | | |
| | MARCH-622 Visualization 2 | | | | |
| | MARCH-631 History 1 | | | | |
| | MARCH-632 History 2 | | | | |
| | MARCH-633 History 3 | | | | |
| | MARCH-634 History 4 | | | | |
| | MSARC-631 Architectural Research Methods | | | | |
| | SDN-601 Sust. Des Methods or SDN-623 Land. Ecology | | | | |
| | MARCH-641 Technology 1 | | | | |
| | MARCH-642 Technology 2 | | | | |
| | MARCH-643 Technology 3 | | | | |
| | MARCH-644 Technology 4 | | | | |
| | MARCH-645 Technology 5 | | | | |
| | MARCH-652 Structures 2 | | | | |
| | MARCH-652 Structures 2 | | | | |
| | MARCH-661 Professional Management | | | | |
| | | | Total Credits | | |

**Part A - Transfer Credit** ( 6 credits max.)

| Semester/yr | Course Number - Course Name | institution | credits | grade |
|---|---|---|---|---|
| | | | | |
| | | | 3 | |
| | | | 4 | |
| | | | 2 | |
| | | | 3 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | Total Credits | | |

**Part B - PhilaU Credits**

| Semester/yr | Course Number /Course Name | Program if not M.ARCH |
|---|---|---|
| | SDN-601 Principles of Sustainable Design | |
| | SDN-621 Ecological Design Studio | |
| | SDN-623 Landscape Ecology Seminar | |
| | MSARC-631 Arch. Research Methods | |
| | | |
| | | |
| | | |
| | | |
| | | |

TOTAL THESIS CREDITS EARNED (6 required)

**TOTAL UNITS EARNED IN PROGRAM** (48 credits minimum required)

THESIS PROJECT DEFENSE/FINAL PRESENTATION COMPLETE Date

THESIS PROJECT FINAL DRAFT TURNED IN TO ADVISOR Date

**Signatures**

Student Date

Primary Advisor Date

Associate Dean Date

**Other degree programs offered by the Architecture Program in the College of Architecture and the Built Environment:**

- M.S. Architecture
- Architecture: B.Arch.
- Architectural Design Technology: B.S. Architectural Studies
- Historic Preservation: B.S. Architectural Studies

Curriculum maps for these programs follow; check sheets for undergrad programs are also included.

PHILADELPHIA UNIVERSITY | COLLEGE OF ARCHITECTURE + THE BUILT ENVIRONMENT

## MASTER OF SCIENCE IN ARCHITECTURE

ONE YEAR CURRICULUM 2015-2016

| CURRICULAR SEQUENCE | SUMMER | FALL 1 | SPRING 1 | SUMMER 1 | |
|---|---|---|---|---|---|
| DESIGN + REPRESENTATION | **MARCH-601** Intro to Design* **3CR** | **SDN-621** [sp] or **622** [fall] SUST. DSN STUDIO **4CR** | **MSARC-901** Graduate Thesis Project I **6CR** | **MSARC-902** Graduate Thesis Project II **3CR** | |
| | **MARCH-602** Intro to Vis* **3CR** | **SDN-601** SUSTAINABLE DESIGN METHO. **3CR** | | | |
| HISTORY + THEORY | | **MSARC-631** RESEARCH METHODS **3CR** | | | |
| ELECTIVES | | | FOCUS ELECTIVE or MSARC-771 IND. STUDY **3CR** | FOCUS ELECTIVE or MSARC-771 IND. STUDY **3CR** | |
| | | | ELECTIVE OR MSARC-791 INTERN. AND RESEARCH **3CR** | ELECTIVE OR MSARC-791 INTERN. AND RESEARCH **3CR** | |
| TOTAL | 6 | 10 | 12 | 9 | 31-37 |

*Required for non-design majors

PHILADELPHIA UNIVERSITY | COLLEGE OF ARCHITECTURE + THE BUILT ENVIRONMENT

## BACHELOR OF ARCHITECTURE

FIVE YEAR CURRICULUM 2015-2016

| CURRICULAR SEQUENCE | YEAR 1 | | YEAR 2 | | YEAR 3 | | YEAR 4 | | YEAR 5 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DESIGN + REPRESENTATION | **ADFND-101** DESIGN 1 Interdisc Explorations **4CR** | **ARCH-102** DESIGN 2 Architectural Graphics **4CR** | **ARCH-213** DESIGN 3 Urban Context **4CR** | **ARCH-214** DESIGN 4 Natural Context **4CR** | **ARCH-311** DESIGN 5 Social Issues **6CR** | **ARCH-312** DESIGN 6 Tectonics **6CR** | **ARCH-401** DESIGN 7 Studio Options **6CR** | **ARCH-412** DESIGN 8 Compre-hensive **6CR** | **ARCH-507** DESIGN 9 RESEARCH STUDIO I **6CR** | **ARCH-508** DESIGN 10 RESEARCH STUDIO II **6CR** | |
| | **ADFND-103** DRAW 1 FREEHAND **3CR** | **ADFND-112** VIS ELECTIVE **3CR** | **ARCHDSN-208** VIS 1 RHINO + AUTOCAD **3CR** | | | **ARCH-326** VIS 2 ADVANCED MODELING **3CR** | | | | | |
| HISTORY + THEORY | | | **AHIST-205** HISTORY 1 ANCIENT TO MEDIEVAL **3CR** | **AHIST-206** HISTORY 2 RENAISSANCE-BAROQUE **3CR** | **AHIST-305** HISTORY 3 EARLY MODERN **3CR** | **ASHIST-306** HISTORY 4 CONTEM-PORARY **3CR** | | **ARCH-371** DESIGN THEORY **3CR** | | | |
| TECHNOLOGY | MATH 1 INTRO TO CALCULUS **3CR** | MATH 2 OR ELECTIVE **3CR** | | **ARCH-303** STRUCTURES 1 LINEAR FORCES **3CR** | **ARCH-304** STRUCTURES 2 COLS/BEAMS **3CR** | | | | | | |
| | ENVIRO-MENTAL SCIENCE **3CR** | PHYS-101 GENERAL PHYSICS **3CR** | **ARCHDSN-210** TECH 1 MATERIALS + METHODS **3CR** | **ARCH-212** TECH 2 PASS SYS + BLDG ENV **3CR** | **ARCH-313** TECH 3 DYNAMIC SYSTEMS **3CR** | **ARCH-314** TECH 4 APPLIED SYSTEMS **3CR** | | **ARCH-416** TECH 5 REVIT + CDS **3CR** | | | |
| PROFESSIONAL PRACTICE | | | | | | | | | **ARCH-503** PROFESSIONAL MANAGEMENT **3CR** | | |
| HALLMARKS | **WRIT-101** WRITING SEMINAR 1 **3CR** | **HIST-114** AMERICAN TRANSITIONS **3CR** | **WRIT-201 OR 202*** WRITING SEMINAR 2 **3CR** | **SOC-2XX** SOCIAL SCIENCES 1 **3CR** | HUMANITIES 1 **3CR** | LANGUAGE/ AREA STUDIES **3CR** | LANGUAGE/ AREA STUDIES **3CR** | | | CONTEMP PERSPECTIVES **4CR** | |
| | | | | | | | JUNIOR SEMINAR **3CR** | JUNIOR SEMINAR **3CR** | | | |
| ELECTIVES | | | | | | | | | ELECTIVE **3CR** | ELECTIVE **3CR** | |
| | | | | | | | ELECTIVE **3CR** | ELECTIVE **3CR** | ELECTIVE **3CR** | ELECTIVE **3CR** | |
| TOTAL | 16 | 16 | 16 | 16 | 18 | 18 | 15 | 18 | 15 | 16 | 164 |

*WRIT-202 (4CR) FOR TRANSFER STUDENTS

PHILADELPHIA UNIVERSITY | COLLEGE OF ARCHITECTURE + THE BUILT ENVIRONMENT

# BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES

ARCHITECTURAL DESIGN TECHNOLOGY CONCENTRATION | FOUR YEAR CURRICULUM 2015-2016

| CURRICULAR SEQUENCE | YEAR 1 | | YEAR 2 | | YEAR 3 | | YEAR 4 | | |
|---|---|---|---|---|---|---|---|---|---|
| DESIGN + REPRESENTATION | **ADFND-101** DESIGN 1 Interdesc Foundation Studies **4CR** | **ADFND-103** DESIGN 2 Foundation Studies **4CR** | **ARCH-213** DESIGN 3 Urban Context **4CR** | **ARCH-214** DESIGN 4 Natural Context **4CR** | **LARCH-310** GIS for LARCH **3CR** | | **LARCH-515** ADVANCED GIS **3CR** | | |
| | **ADFND-103** DRAWING 1 **3CR** | **ADFND-112** VIS ELECTIVE **3CR** | **ARCHDSN-208** VIS 1 RHINO + AUTOCAD **3CR** | | | | | | |
| HISTORY + THEORY | | | **AHIST-205** HISTORY 1 ANCIENT TO MEDIEVAL **3CR** | **AHIST-206** HISTORY 2 RENAISSANCE-BAROQUE **3CR** | **AHIST-305** HISTORY 3 EARLY MODERN **3CR** | **ASHIST-306** HISTORY 4 CONTEM-PORARY **3CR** | | | |
| TECHNOLOGY | MATH 1 INTRO TO CALCULUS **3CR** | MATH 2 OR ELECTIVE **3CR** | | **ARCH-303** STRUCTURES 1 LINEAR FORCES **3CR** | **ARCH-304** STRUCTURES 2 COLS/BEAMS **3CR** | | | | |
| | **SCI-108 OR 110** ENVIRO-MENTAL SCIENCE **3CR** | **PHYS-101** GENERAL PHYSICS **3CR** | **ARCHDSN-210** TECH 1 MATERIALS + METHODS **3CR** | **ARCH-212** TECH 2 PASS SYS + BLDG ENV **3CR** | **ARCH-313** TECH 3 DYNAMIC SYSTEMS **3CR** | **ARCH-314** TECH 4 APPLIED SYSTEMS **3CR** | | **ARCH-416** TECH 5 REVIT + CDS **3CR** | |
| PROFESSIONAL PRACTICE | | | | | | | **ARCH-503** PROFESSIONAL MANAGEMENT **3CR** | | |
| HALLMARKS | **WRIT-101** WRITING SEMINAR 1 **3CR** | **DBTU-114** DEBATING ISSUES **3CR** | **WRIT-201** WRITING SEMINAR 2 **3CR** | **ETHIC-2( )** ETHICS **3CR** | **ADVI-2( )** AMERICAN DIVERSITY **3CR** | **ACCT-101** FINANCIAL ACCOUNTING **3CR** | **BLAW-301** BUSINESS LAW 1 **3CR** | **ISEM-3XX** INTEGRATIVE SEMINAR **3CR** | |
| | | **FYS-101** PATHWAYS SEMINAR **1CR** | | | **GCIT-2( )** GLOBAL CITIZENSHIP **3CR** | **DBTU-300** DEBATING GLOBAL ISSUES **3CR** | **DBTU-300** DEBATING GLOBAL ISSUES **3CR** | **HALLMK-499** CAPSTONE FOLIO WORKSHOP **3CR** | |
| ELECTIVES | | | | | | | ELECTIVE **3CR** | ELECTIVE **3CR** | |
| | | | | | | ELECTIVE **3CR** | INTERNSHIP OR ELECTIVE **3CR** | INTERNSHIP OR ELECTIVE **3CR** | |
| TOTAL | 16 | 17 | 16 | 16 | 18 | 15 | 15 | 15 | 128 |

PHILADELPHIA UNIVERSITY | COLLEGE OF ARCHITECTURE + THE BUILT ENVIRONMENT

# BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES

HISTORIC PRESERVATION CONCENTRATION | FOUR YEAR CURRICULUM 2015-2016

| CURRICULAR SEQUENCE | YEAR 1 | | YEAR 2 | | YEAR 3 | | YEAR 4 | | |
|---|---|---|---|---|---|---|---|---|---|
| DESIGN + REPRESENTATION | **ADFND-101** DESIGN 1 Interdesc Foundation Studies **4CR** | **ARCH-102** DESIGN 2 Foundation Studies **4CR** | **ARCH-201** DESIGN 3 Urban Context **3CR** | | | | | | |
| | **ADFND-103** DRAWING 1 **3CR** | **INTD-106** Technical Drawing and Graphics **3CR** | **ARCHDSN-208** VIS 1 RHINO + AUTOCAD **3CR** | | | | | | |
| HISTORY + THEORY | | | **AHIST-205** HISTORY 1 ANCIENT TO MEDIEVAL **3CR** | **AHIST-206** HISTORY 2 RENAISSANCE-BAROQUE **3CR** | **AHIST-305** HISTORY 3 EARLY MODERN **3CR** | **STUDY ABROAD** (ROME) OR FREE ELECTIVE **3CR** | | **ASHIST-306** HISTORY 4 CONTEM-PORARY **3CR** | |
| | | | **ARCST-221** INTRO TO HIST. PRES. **3CR** | | **ARCST-302** ARCHIVAL RESEARCH FOR HP **3CR** | **STUDY ABROAD** (ROME) OR FREE ELECTIVE **3CR** | **ARCST-341** AMERICAN ARCHITECTURE **3CR** | **ARCST-412** ADAPTIVE REUSE CAP. STUDIO **3CR** | |
| TECHNOLOGY | **MATH 1** INTRO TO CALCULUS **3CR** | **MATH 2** OR ELECTIVE **3CR** | **ARCST-266** PRESERV. TECH. 1 **3CR** | **PHOTO-436** HP DOC.: PHOTOG. **3CR** | **ARCST-324** HP DOC.: DRAWING **3CR** | | **ARCST-428** RESTORATION/REHABILITATION INTERIORS **3CR** | | |
| | **SCI-108 OR 110** ENVIRO-MENTAL SCIENCE **3CR** | **PHYS-101** GENERAL PHYSICS **3CR** | | | | | | | |
| RESOURCE MANAGEMENT & PRACTICE | | | | | | | | **LARCH-507** CULTURAL & LANDSCAPE PRESERV. **3CR** | |
| HALLMARKS | **WRIT-101** WRITING SEMINAR 1 **3CR** | **DBTU-114** DEBATING ISSUES **3CR** | | **ETHIC-2( )** ETHICS **3CR** | **ADVI-2( )** AMERICAN DIVERSITY **3CR** | **GDIV-2( )** GLOBAL DIVERSITY OR LANGUAGE **3CR** | | | |
| | **DBTU-114** DEBATING U.S. ISSUES **3CR** | **FYS-101** PATHWAYS SEMINAR **1CR** | | **WRIT-201** WRITING SEMINAR 2 **3CR** | **GCIT-2( )** GLOBAL CITIZENSHIP **3CR** | **DBTU-300** DEBATING GLOBAL ISSUES **3CR** | | **HALLMK-499** CAPSTONE FOLIO WORKSHOP **3CR** | |
| ELECTIVES | | | | | | | ELECTIVE **3CR** | | |
| | | | | | | | ELECTIVE **3CR** | INTERNSHIP OR FREE ELECTIVE **3CR** | |
| TOTAL | 19 | 17 | 15 | 12 | 15 | 12 | 15 | 15 | 120 |

PHILADELPHIA UNIVERSITY **5-Yr BACHELOR OF ARCHITECTURE** **2014-2015**

Name _____ ID# _____

| LEVEL I (FIRST YEAR) – 34-35 credits | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|
| **Hallmarks Core Courses** – 19-20 credits | | | | | | |
| FYS-101 | Pathways Seminar | | 1 | ☐ | | |
| WRIT-101/101G | Writing Seminar I: Written Communication | | 3 | ☐ | | |
| DBTU-114 | Debating U.S. Issues | | 3 | ☐ | | |
| SCI-1 ( ) | Science I: SCI-108 or SCI-110 (Fall) | | 3 | ☐ | | |
| PHYS-101 | Science II: General Physics (Spring) | (Quantitative Reasoning I) | 3 | ☐ | | |
| MATH-1( ) | Quantitative Reasoning I (select one 2-course option below) | | 3-4 | ☐ | | |
| ( ) | Quantitative Reasoning II (select below) or Free Elective | | 3 | ☐ | | |

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

| | | |
|---|---|---|
| MATH-102 | Pre-Calculus (3 cr.) | Quantitative Reasoning I |
| MATH-103 | Introduction to Calculus (3 cr.) | Quantitative Reasoning II |
| MATH-103 | Introduction to Calculus (3 cr.) | Quantitative Reasoning I |
| ( ) | Free Elective (3 cr.) | |
| MATH-111 | Calculus I (4 cr.) | Quantitative Reasoning I |
| ( ) | Free Elective (3 cr.) | |

**Physical Education...OR...Community Service** - 1 credit (select one, 1 credit option below)

| | | | | | |
|---|---|---|---|---|---|
| PE-( ) | Physical Education (.5 cr) | SERV-101: | ## | ☐ | |
| PE-( ) | Physical Education (.5 cr) | Community Service (1 cr.) | ## | ☐ | |

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses** – 14 credits

| | | | | | | |
|---|---|---|---|---|---|---|
| * | ADFND-101 | Design 1: Interdisc Foundation Studies (Fall) | | 4 | ☐ | |
| | ADFND-103 | Drawing 1 | | 3 | ☐ | |
| | ARCH-102 | Design 2: Arch. Foundation Studies (Spring | (ADFND-101*) | 4 | ☐ | |
| | Visualization Elective: (Select one from the following) ADFND-112, ADFND-104, INTD-108, ADFND-110, LARCH-203 | | | | | |
| | ( ) | | | 3 | ☐ | |

| LEVEL II (SECOND YEAR) – 32 credits | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|
| **Hallmarks Core Courses** –6 credits | | | | | | |
| ETHIC-2( ) | Ethics (Fall or Spring) | (WRIT-101, DBTU-114) | 3 | ☐ | | |
| WRIT-2( ) | Writing Seminar II: Multimedia Communics | (WRIT-1xx) | 3 | ☐ | | |
| **Major Courses** – 26 credits | | | | | | |
| Fall ARCH-213 | Design 3: Arch. Foundation Studies | (ARCH-102*) | 4 | ☐ | | |
| ARCHDSN-210 | Technology 1: Materials & Methods | (ARCH-102*) | 3 | ☐ | | |
| AHIST-205 | History 1: Blt Env, Anc/Medieval | (WRIT-101/101G) | 3 | ☐ | | |
| ARCHDSN-208 | Vis. 1: Digital Modeling (Fall) | (ARCH-102*) | 3 | ☐ | | |
| Spring ARCH-214 | Design 4: Arch. Foundation Studies | (ARCH-213*) | 4 | ☐ | | |
| ARCH-212 | Technology 2: Passive Sys. Bldg. Enclos. | (ARCHDSN-210) | 3 | ☐ | | |
| AHIST-206 | History 2: Renaissance/Baroque | (AHIST-205) | 3 | ☐ | | |
| ARCH-303 | Structures 1 | (MATH-103 or 111, PHYS-101) | 3 | ☐ | | |

| LEVEL III (THIRD YEAR) - 36 credits | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|
| **Hallmarks Core Courses** – 6 credits | | | | | | |
| B ADIV-2( ) | American Diversity (Fall or Spring) | (WRIT-101, DBTU-114) | 3 | ☐ | | |
| GCIT-2( ) | Global Citizenship (Fall or Spring) (WRIT-101, DBTU-114 for Area Studies only) | | 3 | ☐ | | |
| **Major Courses** – 30 credits | | | | | | |
| Fall ARCH-311 | Design 5 for Architecture | (5-yr BArch major; ARCH-214*, ARCH-212) | 6 | ☐ | | |
| ARCH-313 | Technology 3: Dynamic Env. Systems | (ARCH-212) | 3 | ☐ | | |
| ARCH-304 | Structures 2 | (ARCH-303) | 3 | ☐ | | |
| AHIST-305 | History 3: Early Modern-1750-1940 | (AHIST-206) | 3 | ☐ | | |
| Spring ARCH-312 | Design 6 for Architecture | (5-yr BArch major; ARCH-214*, AHIST-212) | 6 | ☐ | | |
| ARCH-326 | Vis 2: Advanced Modeling (Fall or Spring) | (ARCHDSN-208) | 3 | ☐ | | |
| AHIST-306 | History 4: Mod/Contemporary | (AHIST-305) | 3 | ☐ | | |
| ARCH-314 | Technology 4; Adv. Bldg. Analysis | (ARCH-304, ARCH-313) | 3 | ☐ | | |

| LEVEL IV (FOURTH YEAR) - 33 credits | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|
| **Hallmarks Core Courses – 9 credits** | | | | | | |
| DBTU-300 | Debating Global Issues (Fall or Spring) | (WRIT 2xx, GDIV-2xx or GCIT-2xx) | 3 | ☐ | | |
| ISEM-3xx | Integrative Seminar (Fall or Spring) | (WRIT 2xx, GDIV-2xx or GCIT-2xx) | 3 | ☐ | | |
| B ( ) | Global Diversity (or language) | (WRIT 2xx, GDIV-2xx or GCIT-2xx) | 3 | ☐ | | |
| **Major Courses – 18 credits** | | | | | | |
| K Nexus Design Expreience (Fall or Spring) | | (ARCH-311*, ARCH-312*) | 6 | ☐ | | |
| ARCH-412 | Design 8 for Architecture (Fall or Spring) (ARCH-314; ARCHDSN-208; ARCH-311*, ARCH-312*; co-requisite ARCH-416) | | 6 | ☐ | | |
| ARCH-416 | Technology 5: Doc. and Det. (Fall or Spring) | (ARCH-326; co-req. ARCH-412) | 3 | ☐ | | |
| Theory Seminar: (Select one from the following) ARCH-320, 324, 413, ARCST-341, 410, 422, PHOTO-307 | | | | | | |
| ( ) | | (Fall or Spring) | 3 | ☐ | | |
| **Free Electives - 6 credits** | | | | | | |
| ( ) | | (Fall or Spring) | 3 | ☐ | | |
| ( ) | | (Fall or Spring) | 3 | ☐ | | |

| LEVEL V (FIFTH YEAR) - 30 credits | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|
| **Hallmarks Core Courses - 3 Credits** | | | | | | |
| HALLMK-499 | Capstone Folio Workshop (DBTU-300, GDIV-2xx or GCIT-2xx, ETHO-2xx or GCIT-2xx) (Humanities I, one course from ARBST-2xx or Foreign Language, & one Junior Seminar. May not be taken CR/NC). | | 3 | ☐ | | |
| **Major Courses – 15 credits** | | | | | | |
| Fall ARCH-507 | Design 9 for Architecture (Fall) | (ARCH-412*; Theory Seminar) | 6 | ☐ | | |
| ARCH-503 | Professional Mgmt. (Fall or Spring) | (ARCH-311**, ARCH-312**, (ARCH-400**) | 3 | ☐ | | |
| Spring ARCH-508 | Design 10 for Architecture (Spring) | (ARCH-507*) | 6 | ☐ | | |
| **Free Electives - 12 credits** | | | | | | |
| ( ) | | (Fall) | 3 | ☐ | | |
| ( ) | | (Fall) | 3 | ☐ | | |
| ( ) | | (Spring) | 3 | ☐ | | |
| ( ) | | (Spring) | 3 | ☐ | | |

**TOTAL CREDITS: 165-166 credits**

* A grade of "C" or better is required to advance from one design studio into the next, Design 1 through Design 10.

** A grade of "C" or higher is required for this course

K Must be an approved study abroad, interdisciplinary, or design-build studio or a studio course from another Design program.

B Credits for this course may be earned through the Study Abroad (STUAB-300).

| Fundamentals Courses: (Fundamental "099" courses do not count toward graduation requirements. However, WRIT-100 and ITXA-100 can be used toward graduation credits...as a free elective.) | | | | |
|---|---|---|---|---|
| MATH-099 | Fundamentals of College Mathematics | (must earn C or better) | 3 | ☐ |

***Please Note Philadelphia University Residency Requirement:*** *Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 9 credits must be in Hallmarks courses in order to be eligible for a B.S. degree.*
*This form should be used as a worksheet in conjunction with the catalog and the Hallmarks general education "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.*

COURSE STATUS: ☑ = course to take next semester ☒ = course currently being taken ■ = course completed

8.7.14

PHILADELPHIA UNIVERSITY

## BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES

2014-2015

**Architectural Design Technology Concentration**

Name _____ ID# _____

| LEVEL I (FIRST YEAR) – 34-35 credits | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|
| **Hallmarks Core Courses – 19-20 credits** | | | | | | |
| FYS-101 | Pathways Seminar | | 1 | ☐ | | |
| WRIT-101/101G | Writing Seminar I: Written Communication<br>WRIT-100 may only be used to satisfy free elective credits | | 3 | ☐ | | |
| DBTU-114 | Debating U.S. Issues | | 3 | ☐ | | |
| SCI-1 ( ) | Science I: SCI-108 or SCI-110 (Fall) | | 3 | ☐ | | |
| PHYS-101 | Science II: General Physics (Spring) | (Quantitative Reasoning I) | 3 | ☐ | | |
| MATH-1( ) | Quantitative Reasoning I (select one, 2-course option below) | | 3-4 | ☐ | | |
| ( ) | Quantitative Reasoning II (select below) or Free Elective (ACCT 101 Recommt) | | 3 | ☐ | | |

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student placed into, and passed, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

| | |
|---|---|
| MATH-102 Pre-calculus (3 cr.)<br>MATH-103 Introduction to Calculus (3 cr.) | |
| MATH-103 Introduction to Calculus (3 cr.)<br>( ) Free Elective (3 cr.) | |
| MATH-111 Calculus I (4 cr.)<br>( ) Free Elective (3 cr.) | |

**Physical Education...OR...Service Learning...OR...University Discovery - 1 credit** (select one, 1 credit option below)

| | | | | | | |
|---|---|---|---|---|---|---|
| PE-( ) Physical Education (.5 cr) | SERV-101 Service Learning (1 cr.) | DIV-100 University Discovery (1 cr.) | | ☐ | | |
| PE-( ) Physical Education (.5 cr) | | | | ☐ | | |

**Major Courses – 14 credits**

| | | | | | | |
|---|---|---|---|---|---|---|
| Fall | ADFND-101 | Design 1: Interdisc Foundation Studies | | 4 | ☐ | |
| | ADFND-103 | Drawing I for Architecture & Design | | 3 | ☐ | |
| Spring | ARCH-102 | Design 2: Foundation Studies | (ADFND-101*) | 4 | ☐ | |
| | **Drawing II-Visualization Elective:** (Select one from the following) ADFND-112, ADFND-104, INTD-106, ADFND-110, LARCH-203 | | | | | |
| | ( ) | | | 3 | ☐ | |

| LEVEL II (SECOND YEAR) – 32 credits | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|
| **Hallmarks Core Courses –6 credits** | | | | | | |
| ETHIC-2( ) | Ethics (Fall or Spring) | (WRIT-101, DBTU-114) | 3 | ☐ | | |
| WRIT-2( ) | Writing Seminar II: Multimedia Communica | (WRIT-1xx) | 3 | ☐ | | |

**Major Courses – 26 credits**

| | | | | | | |
|---|---|---|---|---|---|---|
| Fall | ARCH-201 | Design 3: Arch. Foundation Studies | (C or better in ADFND-102) | 4 | ☐ | |
| | ARCHDSN-210 | Technology 1: Materials & Methods | (C or better in ADFND-102) | 3 | ☐ | |
| | ARCHDSN-208 | Visualization 1: Digital Modeling (Fall or Spri | (C or better in ADFND-102) | 3 | ☐ | |
| | AHIST-205 | History 1: Blt Env, Anc/Medieval | (WRIT-101/101G) | 3 | ☐ | |
| Spring | ARCH-202 | Design 4: Arch. Foundation Studies | (C or better in ADFND-102) | 4 | ☐ | |
| | ARCH-212 | Technology 2 | (ARCHDSN-210) | 3 | ☐ | |
| | AHIST-206 | History 2: Renaissance/Baroque | (AHIST-205) | 3 | ☐ | |
| | ARCH-303 | Structures 1 | (MATH-103 or 111, PHYS-101) | 3 | ☐ | |

| LEVEL III (THIRD YEAR) - 33 credits | | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|---|
| **Hallmark Core Courses – 9 credits** | | | | | | | |
| B | ADIV-2( ) | American Diversity (Fall or Spring) | (WRIT-101, DBTU-114) | 3 | ☐ | | |
| | GCIT-2( ) | Global Citizenship (Fall or Spring) | (WRIT-101, DBTU-114 for Area | 3 | ☐ | | |
| | GDIV-2( ) | Global Diversity or Language (Fall or Spring) | (WRIT-101, DBTU-114 for Area SI | 3 | ☐ | | |
| **Major Courses – 21 credits** | | | | | | | |
| Fall | LARCH-310 | GIS for Landscape Arch. (Fall or Spring) | | 3 | ☐ | | |
| | ARCH-313 | Technology 3 | (ARCH-212) | 3 | ☐ | | |
| | ARCH-304 | Structures 2 | (ARCH-303) | 3 | ☐ | | |
| | AHIST-305 | History 3: Early Modern-1750-1940 | (AHIST-206) | 3 | ☐ | | |
| Spring | ACCT 101 | Financial Accounting (Fall or Spring) | | 3 | ☐ | | |
| | ARCH-314 | Technology 4 | (ARCH 313) | 3 | ☐ | | |
| | AHIST-306 | History 4: Mod/Contemporary | (AHIST-305) | 3 | ☐ | | |
| **Free Electives - 3 credits** | | | | | | | |
| | ( ) | (Fall or Spring) | | 3 | ☐ | | |

| LEVEL IV (FOURTH YEAR) - 30 credits | | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|---|
| **Hallmarks Core Courses – 9 credits** | | | | | | | |
| | ISEM-3xx | Integrative Seminar (Fall or Spring) | (WRIT 2xx, GDIV-2xx or GCIT-2xx) | 3 | ☐ | | |
| | DBTU-300 | Debating Global Issues (Fall or Spring) | (WRIT 2xx, GDIV-2xx or GCIT-2xx) | 3 | ☐ | | |
| | HALLMK-499 | Capstone Folio Workshop | (DBTU-300, GDIV-2xx or GCIT-2xx, ETHID-2xx or GCIT-2xx ) | 3 | ☐ | | |
| **Major Courses – 12 credits** | | | | | | | |
| | ARCH-503 | Professional Management | | 3 | ☐ | | |
| | ARCH-416 | Technology 5 (BIM) | (ARCH 413) | 3 | ☐ | | |
| | LARCH 515 (or BAIM) | Advanced GIS | (LARCH 310) | 3 | ☐ | | |
| | BLAW 301 | Business Law 1 | | 3 | ☐ | | |
| **Free Electives - 9 credits** See chart below for recommended electives for focus areas | | | | | | | |
| | ( ) | (Fall or Spring) | | 3 | ☐ | | |
| | ( ) | (Fall or Spring) | | 3 | ☐ | | |
| | ( ) | (Fall or Spring) | | 3 | ☐ | | |

**TOTAL CREDITS: 129-130**

| Elective Focus | Recommended Courses |
|---|---|
| Const. Man. | CMGT 102, CMGT 104 |
| Building Tech. | ARCH 413, ARCH 414, ARCH 426 |
| Sustainability | SUST 204, SUST 300 |
| Business | MKTG 102, ECON 205, ECON 206, FINC 301, MGMT 301, MGMT 310 |

B Credits for this course may be earned through the Study Abroad (STUAB-300).

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRIT-100 and ITXA-100 **can** be used toward graduation credits....as a free elective.)

MATH-099 Fundamentals of College Mathematics (must earn C or better) 3 ☐

**Surplus credits not used toward degree requirements**

*Please note Philadelphia University residency requirement: Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 9 credits must be in Hallmarks courses in order to be eligible for a B.S. degree.*

*This form should be used as a worksheet in conjunction with the catalog and the Hallmarks general education "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.*

COURSE STATUS: ☑ = course to take next semester ☒ = course currently being taken ■ = course completed 8.7.14

PHILADELPHIA UNIVERSITY

## BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES — 2014-2015

**Historic Preservation Concentration**

Name _____ ID# _____

| LEVEL I (FIRST YEAR) – 34-35 credits | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|
| **Hallmarks Core Courses – 19-20 credits** | | | | | | |
| FYS-101 | Pathways Seminar | | 1 | ☐ | | |
| WRIT-101/101G | Writing Seminar I: Written Communication | | 3 | ☐ | | |
| DBTU-114 | Debating U.S. Issues | | 3 | ☐ | | |
| SCI-1 ( ) | Science I: SCI-108 or SCI-110 (Fall) | | 3 | ☐ | | |
| PHYS-101 | Science II: General Physics (Spring) | (Quantitative Reasoning I) | 3 | ☐ | | |
| MATH-1( ) | Quantitative Reasoning I (select one, 2-course option below) | | 3-4 | ☐ | | |
| ( ) | Quantitative Reasoning II (select below) or Free Elective (ACCT-101 Recomm'd) | | 3 | ☐ | | |

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

| | |
|---|---|
| MATH-102 | Pre-calculus (3 cr.) |
| MATH-103 | Introduction to Calculus (3 cr.) |
| MATH-103 | Introduction to Calculus (3 cr.) |
| ( ) | Free Elective (3 cr.) |
| MATH-111 | Calculus I (4 cr.) |
| ( ) | Free Elective (3 cr.) |

**Physical Education...OR...Service Learning...OR...University Discovery - 1 credit** (select one, 1 credit option below)

| | | | | |
|---|---|---|---|---|
| PE-( ) Physical Education (.5 cr) | SERV-101 Service Learning (1 cr.) | DIY-100 University Discovery (1 cr.) | ☐ | |
| PE-( ) Physical Education (.5 cr) | | | ☐ | |

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 14 credits**

| | | | | | | |
|---|---|---|---|---|---|---|
| Fall | ADFND-101 | Design 1: Interdisc Foundation Studies | | 4 | ☐ | |
| | ADFND-103 | Drawing I for Architecutre & Design | | 3 | ☐ | |
| Spring | ARCH-102 | Design 2: Foundation Studies | (C or better in ADFND-101) | 4 | ☐ | |
| | INTD-106 | Technical Drawing and Graphic | (DRAW-101 & ADFND-101) | 3 | ☐ | |

| LEVEL II (SECOND YEAR) – 30 credits | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|
| **Hallmarks Core Courses – 6 credits** | | | | | | |
| ETHIC-2( ) | Ethics (Fall or Spring) | (WRIT-101, DBTU-114) | 3 | ☐ | | |
| WRIT-2( ) | Writing Seminar II: Multimedia Commun | (WRIT-1xx) | 3 | ☐ | | |

**Major Courses – 24 credits**

| | | | | | | |
|---|---|---|---|---|---|---|
| Fall | ARCH-201 | Design 3 (4cr.) or Free Elective (3 cr.) | (ADFND-102 or INTD-102 or LARCH-102) | 3 | ☐ | |
| | ARCST-221 | Intro to Historic Preservation | (ADFND-102 or INTD-102 or LARCH-102) | 3 | ☐ | |
| | ARCST-266 | Preservation Technology 1 | | 3 | ☐ | |
| | ARCHDSN-208 | Visualization I: Digital Modeling | (C or better in ADFND-102) | 3 | ☐ | |
| | AHIST-205 | History 1: Bit Env, Anc/Medieval | (WRIT-101/101G) | 3 | ☐ | |
| Spring | ARCST-268 | Preservation Technology 2 | | 3 | ☐ | |
| | PHOTO-436 | HP Documentation: Photography | | 3 | ☐ | |
| | AHIST-206 | History 2: Renaissance/Baroque | (AHIST-205) | 3 | ☐ | |

BACHELOR OF SCIENCE: **ARCHITECTURAL STUDIES** (2014-2015)
**Historic Preservation Concentration - [Page 2]**

| **LEVEL III (THIRD YEAR) - 30 credits** | | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|---|
| **Hallmarks Core Courses** –15 credits | | | | | | | |
| B | ADIV-2( ) | American Diversity (Fall or Spring) | (WRIT-101, DBTU-114) | 3 ☐ | | | |
| | GCIT-2( ) | Global Citizenship (Fall or Spring) | (WRIT-101, DBTU-114 for Area Studies only) | 3 ☐ | | | |
| | GDIV-2( ) | Global Diversity or Language (Fall or Spring) | (WRIT-101, DBTU-114 for Area S | 3 ☐ | | | |
| | ISEM-3xx | Integrative Seminar (Fall or Spring) | (WRIT 2xx, GDIV-2xx or GCIT-2xx) | 3 ☐ | | | |
| | DBTU-300 | Debating Global Issues (Fall or Spring) | (WRIT 2xx, GDIV-2xx or GCIT-2xx) | 3 ☐ | | | |
| **Major Courses – 15 credits** | | | | | | | |
| Fall | ARCST-324 | HP Documentation: Drawing | ( ARCH/DSN-208) | 3 ☐ | | | |
| | AHIST-305 | History 3: Early Modern Arch & Interiors | (AHIST-206) | 3 ☐ | | | |
| | ARCST-302 | Archival Research for Historic Preservati | (ARCST-221) | 3 ☐ | | | |
| Spring | ( ) | Historic Preservation Seminar *(Rome)* or Free Elective | | 3 ☐ | | | |
| | ( ) | History and Theory of Urban Forms *(Rome)* or Free Elective | | 3 ☐ | | | |

| **LEVEL IV (FOURTH YEAR) - 31 Credits** | | | (Prerequisite) | Cr | Sem. | Grade | TR Equiv. |
|---|---|---|---|---|---|---|---|
| **Hallmarks Core Courses** – 3 credits | | | | | | | |
| | HALLMK-499 | Capstone Folio Workshop | (DBTU-300, GDIV-2xx or GCIT-2xx, ETHID-2xx or GCIT-2xx ) | 3 ☐ | | | |
| **Major Courses** – 29 credits | | | | | | | |
| Fall | ARCST-428 | Restoration/Rehabilitation Interiors | (AHIST-305 or LARCH-307) | 3 ☐ | | | |
| | ARCST-341 | American Architecture | (AHIST-206 or LARCH-206) | 3 ☐ | | | |
| | ( ) | Internship or Free Elective | | 3 ☐ | | | |
| | ( ) | Free elective | | 3 ☐ | | | |
| | ( ) | Free elective | | 3 ☐ | | | |
| Spring | AHIST-306 | History 4: Modern/Contemporary | (AHIST-305) | 3 ☐ | | | |
| | ARCST-4XX | Capstone Studio: Adaptive Reuse | (permission of director) | 4 ☐ | | | |
| | ARCST-4XX | Cultural Site Management | (ARCST-221) | 3 ☐ | | | |
| | ( ) | Internship or Free Elective | (permission of director) | 3 ☐ | | | |

**TOTAL CREDITS: 125-126**

| **Recommended Electives** | |
|---|---|
| ARCST-300 | Exhibition Design and Planning |
| LARCH-507 | Cultural and Landscape Preservation |
| UARC-3xx | Historic Preservation Seminar (Rome) |
| UARC-3xx | History and Theory of Urban Forms |
| INTRN-493 | Internship |

B Credits for this course may be earned through the Study Abroad (STUAB-300).

**Fundamentals Courses:** (Fundamental "089" courses do **not** count toward graduation requirements. However, WRIT-100 and IXTA-100 **can** be used toward graduation credits....as a free elective.)

MATH-089 Fundamentals of College Mathematics (must earn C or better) 3 ☐

**Surplus credits not used toward degree requirements**

*Please note Philadelphia University residency requirement: Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 9 credits must be in Hallmarks courses in order to be eligible for a B.S. degree.*

*This form should be used as a worksheet in conjunction with the catalog and the Hallmarks "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.*

**COURSE STATUS:** ☑ = course to take next semester ☒ = course currently being taken ■ = course completed

## II.3 Evaluation of Preparatory Education

The M.Arch. program is designed for students with non-architectural baccalaureate degrees. Applicant's transcripts will be evaluated by the University Office of Graduate Admissions; portfolio and undergraduate equivalency course work will be evaluated by the Director of Architecture Programs and M.Arch. Associate Director. Application requirements and evaluation criteria are outlined below:

- Bachelor's degree from any discipline
- Official academic transcripts
- Current resume
- Two letters of recommendation
- Personal statement (see below for full details)
- Portfolio (see below for full details)

*Personal Statement:* The personal statement should articulate why the student wants to become an architect, their goals and why they want to be a part of the Philadelphia University Master of Architecture program. The personal statement should be 500-1000 words.

*Portfolio Requirements:* The portfolio is a collection of previous work that relates to the skills necessary to succeed in the PhilaU Architecture Program. It is intended to document previous college work that has satisfied academic requirements or independent creative work exhibiting competencies that support the application. The purpose of the portfolio is to give evidence of promise and potential in architecture, as well as to give evidence of interests, skills, and talent. Students need not have architectural drawings or work. The portfolio should include examples of projects, coursework or independent creative work that showcases abilities and promise specific to the M.Arch. program. These might include drawings, photographs, sculpture, handcrafted items, written essays etc.

## II.4 Public Information

In order to promote transparency and clarity in the accreditation process, the program will make all of the following documents available to the public once Initial Candidacy is granted:
(Note: several of these documents are currently available online on the M.Arch website; all of these documents are available on the B.Arch website.)

### II.4.1 Statement on NAAB-Accredited Degrees

See: http://www.philau.edu/march/Accreditation.html

### II.4.2 Access to NAAB Conditions and Procedures

For the following documents, see: http://www.philau.edu/march/Accreditation.html

- The *2014 Conditions for Accreditation*
- The 2015 *Procedures for Accreditation*

### II.4.3 Access to Career Development Information

Student access to career development and placement services for help in developing, evaluating, and implementing career, education, and employment plans, see:
http://www.philau.edu/careerservices/
and: http://www.philau.edu/careerservices/resourcesbymajor.html#architecture

### II.4.4 Public Access to APRs and VTRs

*For the following document, see:* http://www.philau.edu/march/Accreditation.html

- *Application for Candidacy* decision letter from NAAB:

The program will make the following documents available to the public once Initial Candidacy is granted:

- The APR-IC.
- The final edition of the most recent *Visiting Team Report*, including attachments and addenda.

## II.4.5 ARE Pass Rates

ARE pass rates will be posted online when they become available. Current pass rates are available online for the B.Arch program.

## II.4.6. Admissions and Advising

*Admissions Requirements*

- Bachelor's degree from any discipline
- Official academic transcripts
- Current resume
- Two letters of recommendation
- Personal statement (see below for full details)
- Portfolio (see below for full details)

*Personal Statement:*
Your application and all supporting documents help us know your work, your goals, and your abilities as a future architect. Your personal statement should articulate why you want to become and architect and why you want to be a part of the Philadelphia University Master of Architecture program. Please relate these intents to your previous design and academic pursuits, and to future goals. The personal statement should be in PDF format, 500-1000 words and include your full name. Since applications are not reviewed until all application material is received, your essay can be emailed as part of your application or in a separate email to gradadm@philau.edu.

*Portfolio Requirements*
The portfolio is a collection of your previous work that relates to the skills necessary to succeed in the PhilaU Architecture Program. It is intended to showcase your previous college work that has satisfied academic requirements or independent creative work exhibiting competencies that support your application. The purpose of the portfolio is to give evidence of promise and potential in architecture, as well as to give evidence of your interests, skills, and talent. You need not have architectural drawings or work. We welcome applicants without an architectural background.

*Portfolio Guidelines*
Format: Printed or digital file in an 8.5" x 11" format (either portrait or landscape). The portfolio can be a maximum of 25 single-sided pages (this does not include cover or the table of contents). Multiple images can be illustrated on one page, but make sure each is clearly labeled. Do not include original artwork - your portfolio should only contain high-quality reproductions of your work. Three-dimensional objects sent to the University will not be accepted. Careful editing of your work is suggested. Students may also find it helpful to ask a mentor or college instructor for guidance before submitting the final portfolio. If being sent digitally, please send as a PDF.

Front Cover: The cover should include your name, the name of all colleges you have attended and your degrees conferred.

Contents Page: Provide a table of contents listing each piece of student work indicating the University and course information for each piece, or providing the professional or personal context for the work.

Work to Be Included: It is not necessary for your portfolio to include every creative project that you have completed. Submit examples of projects, coursework or independent creative work that showcases your

abilities and promise specific to this program. Your portfolio may include examples of work that you have personally completed in courses, working in a professional office, or on your own. These might include drawings, photographs, sculpture, handcrafted items, written essays etc. If any project, drawing, or model has been produced in a group, or if the design was produced in a professional setting, each project must be labeled, clearly stating what was produced by the applicant and naming the other contributors.

Submission: The portfolio can be emailed to Gradadm@PhilaU.edu or sent on a clearly marked CD or USB formatted as an 8.5" x 11" pdf document. You also have the option of scheduling a visit through the graduate admissions and presenting your portfolio in person.

*Application Forms and Instructions:*
*http://www.philau.edu/graduate/admission.html*

*Requirements and Forms for Financial Aid and Scholarships:*
*http://philau.edu/financialaid/Graduate/index.html*

*Student Diversity*
Philadelphia University is fully committed to making diversity an integral part of its mission. Creating a truly pluralistic community requires continuous effort. To make it happen, each member of the community must strive to work and learn together in an atmosphere of understanding and acceptance. Link to Philadelphia University policy on student diversity:
http://www.philau.edu/studenthandbook/2014-2015/diversity.html

### II.4.7 Student Financial Information

Philadelphia University is committed to making a high-quality, professional education affordable for every qualified student. If meeting educational costs is a concern, the University encourages applicants to apply for financial aid, regardless of family financial circumstances. Many graduate students receive aid in the form of loans, assistantships and/or scholarships.

Link to Office of Financial Aid, Information for Graduate Students:
http://www.philau.edu/financialaid/Graduate/index.html

Link to tuition and other fees:
http://www.philau.edu/studentaccounts/tuitionAndFees/graduate.html#fees

Link to laptop computer requirement and specifications for all architecture students:
http://www.philau.edu/oir/StudentPersonalTechnologySupport/ComputerPurchasing.html

## III.1.1 Annual Statistical Reports

The program will make the M.Arch Statistical Report documents available once data becomes available and after Initial Candidacy is granted. Because the Philadelphia University B.Arch. and M.Arch programs share courses as well as human and physical resources, we are including the most recent (2014) B.Arch report in the APR-IC.

**Philadelphia University NAAB Annual Report – Part I – Statistical Report 2014**
**SECTION A. INSTITUTIONAL CHARACTERISTICS**

**1. Program Contact Information:**

| | |
|---|---|
| Name | Philadelphia University |
| Title | College of Architecture and the Built Environment Architecture |
| Office Phone Number | 215/951-2896 |
| Fax Number | 215/951-2110 |
| Email | doerflerj@philau.edu |

**2. Institution Type:**
Private Not for profit

**3. Carnegie Classification:**

**a. Basic Classification:**
Master's/M: Master's Colleges and Universities (medium programs)

**b. Undergraduate Instructional Program:**
Prof-F/SGC: Professions focus, some graduate coexistence

**c. Graduate Instructional Program:**
Postbac-A&S/Bus: Postbaccalaureate with arts & sciences (business dominant)

**d. Size and Setting:**
S4/HR: Small four-year, highly residential

**4. Which regional accreditation agency accredits your institution**?
Middle States Commision on Higher Education (MSCHE)

**5. In which ACSA region is the institution located?**
Mid Atlantic

**6. Who has direct administrative responsibility for the architecture program?**

| | |
|---|---|
| Name | James A. Doerfler |
| Title | Director of Architecture Programs |
| Office Phone Number | 215.951.0436 |
| Fax Number | 215.951.2110 |
| Email | doerflerj@philau.edu |

**7. To whom should inquiries regarding this questionnaire to be addressed?**

| | |
|---|---|
| Name | James A. Doerfler |
| Title | Director of Architecture Programs |
| Office Phone Number | 215.951.0436 |
| Fax Number | 215.951.2110 |
| Email | doerflerj@philau.edu |

**8. Who is the university administrator responsible for verifying data (and completing IPEDS reports) at your institution?**

| | |
|---|---|
| Name | Mark Palladino |
| Title | Director of Institutional Research |
| Office Phone Number | 215.951.7122 |
| Fax Number | 215.951.2569 |
| Email | ir@philau.edu |

**9. Institutional Test Scores**

**a. SAT**

*Critical Reading*

| | |
|---|---|
| 25th percentile SAT score: | 480 |
| 75th percentile SAT score: | 570 |

*Mathematics*

| | |
|---|---|
| 25th percentile SAT score: | 480 |
| 75th percentile SAT score: | 590 |

*Writing*

| | |
|---|---|
| 25th percentile SAT score: | 470 |
| 75th percentile SAT score: | 570 |

**b.ACT**
25th percentile ACT score: 21
75th percentile ACT score: 25

**c. Graduate Record Examination (GRE)**
Verbal: (200-800)
Quantitative: (200-800)
Analytical: (0.0 – 6.0)

## SECTION B – NAAB-ACCREDITED ARCHITECTURE PROGRAMS

### 1. DEGREE PROGRAMS

**a. Which NAAB accredited / candidate degree programs were offered during the last fiscal year?**

**Accredited**
B. Architecture
**Candidate**
N/A

**b. Did your institution offer any pre-professional architecture degree programs during the last fiscal year?** Yes

| Degree Type | Available? | Full Degree Title |
|---|---|---|
| Bachelor of Science | Yes | Bachelor of Science in Architectural Studies |
| Bachelor of Architectural Studies | No | |
| Bachelor of Arts | No | |
| Bachelor of Design | No | |
| Bachelor of Environmental Design | No | |
| Bachelor of Fine Arts | No | |
| Other | No | |

**c. Did your institution offer any post-professional architecture degree programs during the last fiscal year?**
No

**Full Degree Title**

***2.*** **Does your institution have plans to initiate any new NAAB-accredited degree programs?**
Yes

**3. Does your institution have plans to discontinue any of its NAAB-accredited degree programs?**
No

**4. What academic year calendar type does your institution have?**
Two Semesters

**5. Articulation Agreements**
Does the architecture program have articulation agreements with local community colleges? No

**6. Credit Hours for Completion for each program:**

**a.** Indicate the total number of credit hours taken at your institution to earn each NAAB accredited/candidate degree program offered by your institution:
B. Architecture: (166)

**b.** By degree, what is the distribution of credit hours in the following: General Education, Professional, and Electives?
B. Architecture:
General Education: (44)
Professional: (92)
Electives: (30)

**7. Average credit hours per student per term by degree program?**
B. Architecture: (17)

**8. Is your degree program(s) offered in whole, or in part, at more than one campus or location**
No
If YES, please provide location and credit hours offered.

**City and State Country Credit Hours**

**SECTION C –TUITION, FEES AND FINANCIAL SUPPORT FOR STUDENTS IN NAAB-ACCREDITED PROGRAMS**

**1.** Tuition is defined as "the amount of tuition and required fees covering a full academic year most frequently charged to students for instructional services."

**a.** What were the tuition and fees for the institution for the last fiscal year?
B. Architecture: Full-Time Student $31874.00 (Tuition), $600.00 (Fees); Part-Time Student $1065.00 (Tuition), $0.00 (Fees);

**b.** Does the institution offer discounted or differential tuition for a NAAB-accredited degree program? No

**c.** Is a summer session required for any portion of your accredited degree program(s)? No
If yes, what is the additional tuition and fees for the summer program?
d. Does the institution offer discounted or differential tuition for summer courses for a NAAB accredited degree program? No

**2. Financial Aid:** What was the percent of students financial aid at both the institutional and architecture program levels (grants, loans, assistantships, scholarships, fellowships, tuition waivers, tuition discounts, veteran's benefits, employer aid [tuition reimbursement] and other monies [other than from relatives/friends] provided to students to meet expenses? *This includes Title IV subsidized and unsubsidized loans provided directly to student) provided by the institution to students enrolled in each program(s) leading to a NAAB accredited degree during the last fiscal year.*

| Grant Type | % Students Receiving Aid | Average Amount by Types of Aid |
|---|---|---|
| a. Institution Federal Grants | 31% | 5081 |
| a. Institution State/Local Grants | 22% | 3461 |

| | | |
|---|---|---|
| a. Institution Institutional Grants | 96% | 14529 |
| a. Institution Student Loans | 74% | 7295 |
| b. Architecture Program Federal Grants | 28% | 5103 |
| b. Architecture Program State/Local Grants | 21% | 3519 |
| b. Architecture Program Institutional Grants | 98% | 14677 |
| b. Architecture Program Student Loans | 75% | 6918 |

**3. Graduate Assistantships** (What was the total number of graduate-level students employed on a part- time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research during the last fiscal year (Jul 1 – Jun 30) within the NAAB-accredited programs offered by your institution? *Please include: graduate assistant, teaching assistant, teaching associate, teaching fellow or research assistant in your calculation.*

**SECTION D – STUDENT CHARACTERITICS FOR NAAB-ACCREDITED AND PREPROFESSIONAL DEGREE PROGRAMS**

**1. Entering Students:**

B. Architecture: ( 54)

| Race | Male Full Time | Male Part Time | Female Full Time | Female Part Time | TOTAL Full Time | TOTAL Part Time | GRAND TOTAL |
|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 1 | 0 | 1 | 0 | 2 | 0 | 2 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 1 | 0 | 1 | 0 | 2 | 0 | 2 |
| Hispanic/Latino | 2 | 0 | 0 | 0 | 2 | 0 | 2 |
| White | 31 | 0 | 10 | 0 | 41 | 0 | 41 |
| Two or more races | 2 | 0 | 0 | 0 | 2 | 0 | 2 |
| Nonresident alien | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| Race and ethnicity unknown | 2 | 0 | 2 | 0 | 4 | 0 | 4 |
| TOTAL | 40 | 0 | 14 | 0 | 54 | 0 | 54 |

Pre-Professional: ( 12)

| Race | Male Full Time | Male Part Time | Female Full Time | Female Part Time | TOTAL Full Time | TOTAL Part Time | GRAND TOTAL |
|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Black or African American | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| Hispanic/Latino | 1 | 0 | 2 | 0 | 3 | 0 | 3 |
| White | 2 | 0 | 4 | 0 | 6 | 0 | 6 |
| Two or more races | 2 | 0 | 0 | 0 | 2 | 0 | 2 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 6 | 0 | 6 | 0 | 12 | 0 | 12 |
| | | | | | | | |

**2. Total undergraduate/graduate architecture enrollment in NAAB accredited program by race/ethnicity.**

B. Architecture ( 283)

| Race | Male Full Time | Male Part Time | Female Full Time | Female Part Time | TOTAL Full Time | TOTAL Part Time | GRAND TOTAL |
|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Asian | 8 | 0 | 4 | 0 | 12 | 0 | 12 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 3 | 0 | 6 | 0 | 9 | 0 | 9 |
| Hispanic/Latino | 10 | 0 | 8 | 0 | 18 | 0 | 18 |
| White | 125 | 1 | 76 | 0 | 201 | 1 | 202 |
| Two or more races | 4 | 0 | 2 | 0 | 6 | 0 | 6 |
| Nonresident alien | 6 | 0 | 3 | 1 | 9 | 1 | 10 |
| Race and ethnicity unknown | 17 | 0 | 8 | 0 | 25 | 0 | 25 |
| TOTAL | 173 | 1 | 108 | 1 | 281 | 2 | 283 |
| | | | | | | | |

Pre-Professional ( 55)

| Race | Male Full Time | Male Part Time | Female Full Time | Female Part Time | TOTAL Full Time | TOTAL Part Time | GRAND TOTAL |
|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 1 | 0 | 1 | 0 | 2 | 0 | 2 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Black or African American | 2 | 0 | 3 | 0 | 5 | 0 | 5 |
| Hispanic/Latino | 2 | 0 | 3 | 0 | 5 | 0 | 5 |
| White | 20 | 0 | 14 | 0 | 34 | 0 | 34 |
| Two or more races | 2 | 0 | 1 | 0 | 3 | 0 | 3 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 3 | 0 | 2 | 0 | 5 | 0 | 5 |
| TOTAL | 30 | 0 | 25 | 0 | 55 | 0 | 55 |
| | | | | | | | |

## SECTION E -- DEGREES AWARDED

**1. What is the total number of NAAB-accredited degrees that were awarded in the last fiscal year?**

B. Architecture:

| Race | Male | Female | TOTAL |
|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 |
| Asian | 2 | 1 | 3 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 |
| Black or African American | 1 | 2 | 3 |
| Hispanic/Latino | 0 | 0 | 0 |
| White | 24 | 6 | 30 |
| Two or more races | 0 | 0 | 0 |
| Nonresident alien | 0 | 3 | 3 |
| Race and ethnicity unknown | 5 | 1 | 6 |
| TOTAL | 32 | 13 | 45 |

Pre-Professional:

| Race | Male | Female | TOTAL |
|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 |
| Asian | 1 | 0 | 1 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 |
| Black or African American | 0 | 2 | 2 |
| Hispanic/Latino | 1 | 2 | 3 |
| White | 7 | 3 | 10 |
| Two or more races | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 |
| Race and ethnicity unknown | 3 | 0 | 3 |
| TOTAL | 12 | 7 | 19 |

Pre-Professional:

**10. Time to Completion/Graduation**

**a. Time to completion equals the total number of semesters/quarters to complete the degree:**
B. Architecture (10)

**b. Percentage of students that graduate in "normal time to completion":**
B. Architecture (67%)

**11. Graduation rate for B. Arch programs**
Graduation rate for Institution: (66)
Graduation rate for B. Architecture programs: (71)

## SECTION F -- RESOURCES FOR NAAB-ACCREDITED PROGRAMS

**1. What is the total number of permanent workstations (studio desks) that can be assigned to students enrolled in design studios?**
Main Campus (240)
Other Locations

**2. Are your students required to have a laptop computer?**
Yes

**3. Any portion of the program offered online? (NAAB accredited program only)**

No

**4. Please indicate which of the following learning resources are available to all students enrolled in NAAB-accredited degree programs(s).**

| Resource Type | Available? |
|---|---|
| Shop | Yes |
| Computer Facilities (Lab) | Yes |
| Computer Output Facilities (Plotters, Specialized plotting) | Yes |
| Digital Fabrication Facilities | Yes |
| Wireless Network | Yes |
| Image Collection (Slide Library) | No |
| Photo Studio/Darkroom | Yes |
| Lecture Series | Yes |
| Gallery/Exhibits | Yes |
| Other | No |

**If other resources are available, please describe:**

University-wide design events, member access to NextFab a digital fabrication facility in Philadelphia,

**5. Financial Resources**

**a. Total Revenue from all sources $**10569060

**b. Expenditures**

- Instruction **$**3369707
- Capital **$**0
- Overhead **$**173716

**c. Per Student Expenditure:** What is the average per student expenditure for students enrolled in a NAAB accredited degree program. *This is the total amount of goods and services, per student, used to produce the educational services provided by the NAAB-accredited program.*

**Instruction + Overhead / FTE Enrollment:** (10641)

**SECTION G - HUMAN RESOURCE SUMMARY (Architecture Program)**

**1. Credit Hours Taught** (needs definition and perhaps example)

**a.**Total credit hours taught by full time faculty: (262)
**b.**Total credit hours taught by part time faculty: (15)
**c**.Total credit hours taught by adjunct faculty: (297)

**2. Instructional Faculty**

**d. Full-time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor):**

Full Time Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and Ethnicity unkn. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |

Full Time Associate Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 1 | 2 | 0 | 0 | 4 | 1 | 5 | 3 | 8 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 2 | 0 | 0 | 4 | 1 | 5 | 3 | 8 |

Full Time Assistant Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 2 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 2 | 0 | 2 | 0 | 4 | 0 | 4 |
| | | | | | | | | | |

**b. Part-Time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor).**

Part Time Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unkn. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Part Time Associate Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Part Time Assistant Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

### c. Adjunct Faculty Professor, Associate Professor, Assistant Professor, Instructor:

| Race | Professor Male | Professor Female | Associate Professor Male | Associate Professor Female | Assistant Professor Male | Assistant Professor Female | Instructor Male | Instructor Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | | | | | | | | | 0 | 0 | 0 |
| Asian | | | | | | | | | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | | | | | | | | | 0 | 0 | 0 |
| Black or African American | | | | | | | | | 2 | 1 | 3 |
| Hispanic/Latino | | | | | | | | | 0 | 1 | 1 |
| White | | | | | | | | | 35 | 23 | 58 |
| Two or more races | | | | | | | | | 0 | 0 | 0 |
| Nonresident alien | | | | | | | | | 0 | 0 | 0 |
| Race and ethnicity unknown | | | | | | | | | 3 | 4 | 7 |
| TOTAL | | | | | | | | | 40 | 29 | 69 |

### 3. Faculty Credentials:

| Highest Degree Achieved | Professor Male | Professor Female | Associate Professor Male | Associate Professor Female | Assistant Professor Male | Assistant Professor Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| D. Arch. (accredited) | | | | | | | 0 | 0 | 0 |
| M. Arch. (accredited) | | | | | | | 7 | 1 | 8 |
| B. Arch. (accredited) | | | | | | | 0 | 0 | 0 |
| Ph.D. in architecture | | | | | | | 0 | 0 | 0 |
| Ph.D. in other discipline | | | | | | | 2 | 1 | 3 |
| Post-professional graduate degree in architecture | | | | | | | 0 | 0 | 0 |
| Other degrees | | | | | | | 2 | 1 | 3 |
| Registered in U.S. Jurisdiction | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | |

### 4. Salaries

| Instructional Faculty Type | Number | Minimum | Average | Maximum | University Average |
|---|---|---|---|---|---|
| Professor | 2 | 98000 | 99000 | 100000 | 101126 |
| Assoc. Prof. | 8 | 65930 | 75703 | 79005 | 79205 |
| Assist. Prof. | 4 | 60187 | 62700 | 64135 | 65833 |
| Instructor | 0 | 0 | 0 | 0 | 0 |

### III.1.2 Interim Progress Reports

In order to promote transparency in the process of accreditation in architecture education, the program will make these documents available to the public once Initial Candidacy is granted.

# SECTION 4: Supplemental Material

## i. Descriptions of All Courses Offered Within the Curriculum

Course descriptions are organized by design studio courses, visualization courses, architectural history/research courses, technology/structures courses, and professional management (cross-listed B.Arch./M.Arch. courses, existing MSSD Sustainable Design Studio, MSSD Landscape Ecology Seminar and MSARC Research Methods, as well as forthcoming M.Arch.-specific courses are included). Elective courses have not been included. Faculty indicated for each course were from Spring and Fall 2015; Spring 2016 teaching schedules were not available at the time this APR-IC was prepared.

**Course descriptions for the courses listed below can be found on the on the following pages.**

MARCH-601 Introduction to Design
MARCH-611 Design 1
MARCH-612 Design 2
SDN-622 Sustainable Design Studio 1
SDN-621 Sustainable Design Studio 2
MARCH-614 Design 4
MARCH-615 Design 5
MARCH-616 Design 6
MARCH-602 Introduction to Visualization
MARCH-621 Visualization 1
MARCH- 622 Visualization 2
MARCH-631 History 1
MARCH-632 History 2
MARCH-633 History 3
MARCH-634 History 4
MSARC-631 Architectural Research Methods
SDN-601 Sustainable Design Methodologies
SDN-623 Landscape Ecology
MARCH-641 Technology 1
MARCH-642 Technology 2
MARCH-643 Technology 3
MARCH-644 Technology 4
MARCH-645 Technology 5
MARCH-651 Structures 1
MARCH-652-Structures 2
MARCH-661 Professional Management

# Course Description

**MARCH-601 Introduction to Design, 3 credits**
**Course Description**
Foundation design studio course is an introduction to fundamental design principles and vocabulary, representational methods and skills, as well as process methodologies and problem-solving strategies.

**Course Goals & Objectives**
Students will explore concepts and methods of design through a series of design prompts. These projects will address the following basic design issues: form, order, hierarchy, scale, rhythm, light, shadow, texture, color, materiality, representation, and the creative process. Students will be introduced to the process of critique through desk crits, informal pin-ups and formal juried presentations of projects.

The primary objectives of this course are listed below. Students will:

- Effectively demonstrate the fundamentals of visual perception and the systems of order that inform two and three-dimensional design, architectural composition, and urban design.
- Provide evidence of the ability to select and use appropriate representational media to convey essential formal elements at each stage of the design process.
- Demonstrate the development of a design process methodology for resolving theoretical and practical problems.
- Exhibit developmental design communication skills in the ability to read, write, listen, and speak effectively on fundamental design principals, problems, and solutions.
- Demonstrate an awareness of historic precedents as a resource in the design process.

**Student Performance Criterion/ Addressed**
A.5 Ordering Systems

**Topical Outline**
Elements, Language, and Tools of Architecture: 20%
Form/Shape, Dimensional Transformation, and Iteration: 20%
Form, Space, Volume, Scale, and Representation: 20%
Organizing Principals: 20%
Light and Color: 20%

**Prerequisites**
Enrollment in the M.Arch. program or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Ching, Francis ARCHITECTURE: FORM SPACE & ORDER
Ching, Francis ARCHITECTURAL GRAPHICS
Koenig, Becky COLOR WORKBOOK

**Offered**
Summer session, annually

**Faculty Assigned**
Evan Pruitt

# Course Description

**MARCH-611 Design 1, 6 credits**

**Course Description**
Emphasis is placed on designing dense, sustainable, and socially responsible housing and mixed-use urban communities as generators for urban growth and renewal.

**Course Goals & Objectives**
General issues concerning "dwelling" and specific issues addressing residential design are explored. This course also focuses on research and analysis of human patterns of occupancy, adaptation, and settlement. Three design projects will be assigned in this course in addition to accompanying research/analysis projects—all of the projects (design and research) will address the city as a future construct for human settlement. Students will participate in individual and group projects, reading, writing, discussions, field trips, lectures, individual and group critiques. Students will be introduced to Universal Design principles.

**Objectives**
- Develop creative problem-solving ability in two and three-dimensional form and space.
- Students will demonstrate the fundamentals of visual perception and the principles and systems of order that informs two and three-dimensional design, architectural composition and urban design.
- Students exhibit the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects.

**Student Performance Criterion/a Addressed**
A.4 Architectural Design Skills
A.5 Ordering Systems
A.6 Use of Precedents

**Topical Outline**
Research 15%
Design Organization 15%
Residential Design 25%
Contextuality 15%
Sustainable Design Principles 15%
Urban Design Principles15%

**Prerequisites**
Grade of "C" or better in MARCH 601 or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Clark, Roger H. and Michael Pause. *Precedents in Architecture.* Hoboken: Wiley, 2005.
Lynch, Kevin. *The Image of the City*. Cambridge, Mass.: MIT Press, 1960.
Murtagh, William John. "The Philadelphia Row House." *The Journal of the Society of Architectural Historians*, Dec. 1957, Vol. XVI, No. 4.
Rapoport, Amos. *House Form and Culture*. Englewood Cliffs, N.J.: Prentice-Hall, 1969.
*Additional readings assigned will be accessible on reserve in the library, BlackBoard, or through other means.*

**Offered**
Fall semester, annually

**Faculty Assigned:** Donald Dunham

# Course Description

**MARCH-612 Design 2, 6 credits**

**Course Description**
Focus on building in the landscape using the elements, principles and theories of architectural and landscape design. Techniques of representation are developed and refined.

**Course Goals & Objectives**
Students continue to develop basic problem solving skills: analysis, conceptualization, synthesis, critical evaluation and representation. Spatial organization, the interrelationship of interior/ exterior space, structure and enclosure, context and site, perception and human behavior, meaning and use, and aesthetics and the craft of building are considered holistically. Universal Design principles, materiality, tectonics, technology, the environment, and perception will be stressed, as well as the importance of developing a consistent sustainable framework for the projects as a respective response to the environment and our culture.

- Develop the ability to respond to natural and built site characteristics in the development of a program and the design of a project.
- Demonstrate a developmental level of the principles underlying sustainability in making architectural and landscape decisions that conserve natural and built resources, including culturally important buildings and sites, and in the creation of healthful buildings and communities.
- Recognize and analytically interpret global architectural canons and traditions in architecture and landscape design, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them.
- Integrate theories and methods of inquiry into the design process that seek to clarify the relationship between human behavior and the physical environment.

**Student Performance Criterion/a Addressed**

| | |
|---|---|
| A.1 Professional Communication Skills | A.4 Architectural Design Skills |
| A.5 Ordering Systems | A.6 Use of Precedents |

**Topical Outline**
Site Analysis 15%
Site Design 15%
Sustainable Building and Site Design Principles 20%
Schematic Site/Building Design 50%

**Prerequisites**
Grade of “C” or better in MARCH-611 Design 1 or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Ching, Frank, *Architectural Graphics & Architecture, Form, Space and Order* (required)
Berrizbeitia & Pollak, *Inside Outside: Between Architecture and Landscape* (required)
Betsky, Aaron, *Landscrapers: Building with the Land*
Reiser + Umemoto, *Atlas of Novel Tectonics*

**Offered**
Spring semester, annually

**Faculty Assigned**
Donald Dunham/ TBD

# Course Description

**SDN-622 Sustainable Design Studio 1, 4 credits**

**Course Description**
This studio will emphasize interdisciplinary teaching, learning and collaborative work as a fundamental core concept of sustainable design.

**Course Goals & Objectives**

- Compile, describe, analyze statistics, data, and bio-patterns that define socio-economic, physical forces/conditions, and technical systems, of a design project's biome, city/town, client, site, bldgs.
- Identify and prescribe guiding principles, metrics, and benchmarks for ecological systems, design projects, socio-economic programs, that define sustainable project delivery at multiple scales.
- Synthesize analytical processes and from multiple perspectives into multiple design schemes.
- Value interdependence between regions, communities, landscapes, bldgs., interiors, products.
- Apply evaluation strategies including cost estimation, feasibility analysis, ecological resource impact, life-cycle costs/assessment, performative analysis (shading, orientation, EUI, etc)
- Compare results against benchmarking criteria in the development of the project proposal.
- Integrate natural, cultural, and experiential information into the decision-making and design process to develop, test, and refine a sustainable program and design solution.
- Manipulate and reconstruct spatial and temporal datasets using digital workflows to create flexible tools which can inform design decisions.
- Apply team building and organizational skills for diverse groups through the integrated design process; and operate effectively within groups of varied disciplines.
- Communicate project goals, parameters and constraints, through site analysis, diagramming and mapping activities, and in a context that is effective and appropriate to a varying range of audience, key project stakeholders, client, classmates, etc.

**Student Performance Criterion/a Addressed**
B.6 Environmental Systems
B.10 Financial Considerations
C.2 Integrated Evaluations and Decision-Making Process

**Topical Outline**
Site Analysis 15%
Site Design 15%
Sustainable Building and Site Design Principles 20%
Schematic Site/Building Design 50%

**Prerequisites**
MARCH-612 Design 2

**Textbooks / Learning Resources**
The Seven Group. *Integrative Guide to Green Building Design*.
Mark DeKay and G.Z. Brown. Sun Wind and Light Third Edition.
Beck, Travis. Principles of Ecological Landscape Design.

**Offered**
Spring semester, annually

**Faculty Assigned**
Rob Fleming

# Course Description

**SDN-621 Sustainable Design Studio 2, 4 credits**

**Course Description**
This studio will emphasize interdisciplinary teaching, learning and collaborative work as a fundamental core concept of sustainable design.

**Course Goals & Objectives**

- Compile, describe, analyze statistics, data, and bio-patterns that define socio-economic, physical forces/conditions, and technical systems, of a design project's biome, city/town, client, site, bldgs.
- Identify and prescribe guiding principles, metrics, and benchmarks for ecological systems, design projects, socio-economic programs, that define sustainable project delivery at multiple scales.
- Synthesize analytical processes and from multiple perspectives into multiple design schemes.
- Value interdependence between regions, communities, landscapes, bldgs., interiors, products.
- Apply evaluation strategies including cost estimation, feasibility analysis, ecological resource impact, life-cycle costs/assessment, performative analysis (shading, orientation, EUI, etc)
- Compare results against benchmarking criteria in the development of the project proposal.
- Integrate natural, cultural, and experiential information into the decision-making and design process to develop, test, and refine a sustainable program and design solution.
- Manipulate and reconstruct spatial and temporal datasets using digital workflows to create flexible tools which can inform design decisions.
- Apply team building and organizational skills for diverse groups through the integrated design process; and operate effectively within groups of varied disciplines.
- Communicate project goals, parameters and constraints, through site analysis, diagramming and mapping activities, and in a context that is effective and appropriate to a varying range of audience, key project stakeholders, client, classmates, etc.

**Student Performance Criterion/a Addressed**
B.6 Environmental Systems
B.10 Financial Considerations
C.2 Integrated Evaluations and Decision-Making Process

**Topical Outline**
Site Analysis 15%
Site Design 15%
Sustainable Building and Site Design Principles 20%
Schematic Site/Building Design 50%

**Prerequisites**
MARCH-612 Design 2

**Textbooks / Learning Resources**
The Seven Group. *Integrative Guide to Green Building Design*.
Mark DeKay and G.Z. Brown. Sun Wind and Light Third Edition.
Beck, Travis. Principles of Ecological Landscape Design.

**Offered**
Fall semester, annually

**Faculty Assigned**
Rob Fleming

# Course Description

**MARCH-614 Design 4, 6 credits**

**Course Description**
This tectonics studio focuses on the theories surrounding the materials and processes of making architecture. Students investigate building materials to understand their roles in directing the design process.

**Course Goals & Objectives**

- Students demonstrate the ability to prepare a comprehensive program for an architectural project, including preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.
- Students demonstrate the ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.
- Students demonstrate an understanding of building envelope systems and the basic principles involved in their appropriate application, and the associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
- Students demonstrate an understanding of building materials and assemblies, and assembly details, that is: the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.
- Students demonstrate the ability to represent and clearly communicate design intentions through technically precise two and three-dimensional documents showing materials and methods of construction.

**Student Performance Criterion/a Addressed**

B.2 - Site Design
B.3 - Codes and Regulations
B.5 - Structural Systems
B.6 - Environmental Systems
B.7 - Building Envelope Systems and Assemblies
B.8 - Building Materials and Assemblies

**Topical Outline**

Schematic Site and Building Design 20%
Design Development 30%
Building Codes 15%
Sustainable Design 10%
Building Structure and Envelope 25%

**Prerequisites**
MSSD-611 Sustainable Design Studio.

**Textbooks / Learning Resources**
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated.*
Deplazes, Andrea, *Constructing Architecture*

**Offered**
Spring semester, annually

**Faculty Assigned**
Donald Dunham and David Kratzer, coordinators; B. Johnston, E. Pruitt, J. Cassidy, I. D'Angella, E. Litvin

# Course Description

**MARCH-615 Design 5, 6 credits**

**Course Description**
This comprehensive studio explores and examines the integration of systems in a building within the urban context. Site and program are explored as temporal forces.

**Course Goals & Objectives**
Upon successful completion of this course, a student will be able to:

- Identify and Describe appropriate strategies for integrating complex building systems within an architectural project, specific to programmatic, environmental, and climatic constraints.
- Manage the complexity of multiple and dynamic building systems within an architectural context, taking a holistic approach to balance the needs of each system.
- Develop a comprehensive design project in a team setting, which adequately balances the static and temporal forces of a complex architectural project.
- Prepare Design Development documentation to adequately describe an architectural project including, detailing, envelope and enclosure assemblies, materials, structural, and mechanical systems.

**Student Performance Criterion/a Addressed**

A.2 Design Thinking Skills
A.3 Investigative Skills
A.5 Ordering Systems
A.7 History and Global Precedents
B.1 Pre-Design
B.2 Site-Design
B.3 Codes and Regulations
B.4 Technical Documentation
B.5 Structural Systems
B.6 Environmental Systems
B.7 Building Envelope Systems and Assemblies
B.8 Building Materials and Assemblies
B.9 Building Service Systems
C.2 Integrated Evaluations & Decision-Making Process
C.3 Integrative Design
D.1 Stakeholder Roles in Architecture

**Topical Outline**
Personal Life Support System 20%
Building Systems Analysis and Case Studies 20%
Modular Unit Design and Systems Integration 20%
Comprehensive Building Design Project 40%

**Prerequisites**
MARCH-644 Tech 4 and a grade of “C” or better in MARCH-614 Design 4.

**Textbooks / Learning Resources**
Grondzik, Kwok, et al, *Mechanical and Electrical Equipment for Buildings.*
Allen, Edward, *Fundamentals of Building Construction.*
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated.*
Deplazes, Andrea, *Constructing Architecture.*
AIA, Ramsey/Sleeper, *Architectural Graphic Standards*

**Offered**
Fall and spring semesters

**Faculty Assigned**
Matt Gindlesparger, coordinator; E. Stach, T. Kirchner, J. Cassidy

# Course Description

**MARCH-616 Design 6, 6 credits**

**Course Description**
The structure of this course is negotiated with a faculty advisor to inform student research leading to the development of an original comprehensive architectural design thesis project.

**Course Goals & Objectives**
Students at the completion of this course will:

- Articulate, analyze critically and synthesize established theories and building science related to architecture.
- Review and critically analyze original research in architecture and related disciplines.
- Apply and synthesize architectural and building research.
- Conduct research that makes a contribution to the body of knowledge.
- Demonstrate expertise in a chosen area of architectural design or research.
- Demonstrate professional presentation and communication skills.
- Demonstrate the integration of knowledge, analysis and research through the final thesis project.
- Produce a comprehensive design or research solution to a given project or problem.

**Student Performance Criterion/a Addressed**

| | |
|---|---|
| A.1 Professional Communication Skills | B.1 Pre-Design |
| A.2 Design Thinking Skills | B.3 Codes and Regulations |
| A.3 Investigative Skills | C.1 Research |
| A.5 Ordering Systems | C.2 Integrated Evaluations & Decision-Making Process |
| A.6 Use of Precedents | C.3 Integrative Design |

**Topical Outline**
A comprehensive architectural solution to a given architectural project or problem 100%

**Prerequisites**
MARCH 615 with a grade of “C” or better and MSARC 631

**Textbooks / Learning Resources**
Laurel, Brenda. *Design Research: Methods and Perspectives*
Additional readings will either be handed out in class, on reserve in the library or available on the course Blackboard Site. Faculty advisor and student to determine resources applicable to thesis.

**Offered**
Spring semester, annually

**Faculty Assigned**
Donald Dunham/ TBD

# Course Description

**MARCH-602 Introduction to Visualization, 3 credits**

**Course Description**
This course will emphasize how to use a variety of tools, techniques and media while teaching how different production methodologies affect the design process.

**Course Goals & Objectives**
This course is organized alongside the Introduction to Design Studio. The tools and techniques introduced in this course will be directly applicable to the design prompts in the studio. Topics such as sketching, hand drafting, line weight, scale, physical modeling, scanning, plotting, digital 2D drawing and 3D modeling will be covered.

The primary objectives of this course are listed below. Students will:

- Be introduced to the analog and digital tools of architectural production.
- Refine their digital and analog craft, with a strong emphasis on making with a specific purpose or outcome in mind.
- Provide evidence of the ability to select and use appropriate media to develop and represent formal elements.
- Produce legible and productive drawings and models that accurately communicate design concepts.
- Demonstrate an awareness of how designers use tools and techniques in their work.

**Student Performance Criterion/a Addressed**
A.1 Professional Communication Skills

**Topical Outline**
Hand drafting using pencil and ink 20%
Basic model making techniques 20%
Digital representation 20%
Digital form generating 20%
Project documentation techniques 20%

**Prerequisites**
Enrollment in the M.Arch. program or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Allen, Stan. *Practice: Architecture, Technique and Representation*
Reiser + Umemoto. *Atlas of Novel Tectonics*
Adams, Grant. *Digital Tools for Architects Handbook*

**Offered**
Summer session, annually

**Faculty Assigned**
Andrew Hart

# Course Description

**MARCH-621 Visualization 1, 3 credits**

**Course Description**
The primary intent of this course is to establish the computer as an effective tool in the design and presentation process.

**Course Goals & Objectives**

- Demonstrate visual communication skills through the ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process
- Develop a technical knowledge of precision digital drawing and construction in both 2-D and 3-D formats.
- Introduce the use of various digital techniques and outputs depending on the requirements of the design process.
- Develop a solid approach to digital technology that will serve as a foundation for future software and professional expectations.

**Student Performance Criterion/a Addressed**
A.1 Professional Communication Skills

**Topical Outline**
2D CAD drawing 20%
3D modeling 20%
Image post processing 20%
Photorealistic rendering and animation 20%
Graphic editing and portfolio construction 20%

**Prerequisites**
Grade of “C” or better in MARCH 601 Intro to Design and MARCH 602 Intro to Vis, or permission of M.Arch. Program Director.

**Textbooks / Learning Resources**
As assigned by your professor, there will be required readings concerning the history and evolution of digital culture, as well as research on contemporary designers who are using digital technologies.

**Offered**
Fall and spring semesters

**Faculty Assigned**
Andrew Hart, coordinator; M. Roden, K. Hartwig, A. Simmons, K. Blackwell, J. Hydro, S. Gally, C. Hemphill

# Course Description

**MARCH-622 Visualization 2, 3 credits**

**Course Description**
Utilizing advanced explicit modeling and rendering software, students will be instructed on how to develop the latest in conceptual design techniques to augment their skills to enrich their design process.

**Course Goals & Objectives**

- To develop the student's ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- To develop the student's understanding of the diverse theoretical foundations and social settings from which the meaning of architecture (as exhibited in the making of buildings, landscapes and human settlements) has been derived for the last century;
- To develop the student's understanding of the shifts that occur – and have occurred – in the social, political, technological, ecological and economic factors that shape the practice of architecture.
- To familiarize the student with the role of criticism and the relationship of criticism to theory;
- To develop the student's ability to incorporate theoretical foundations into the design process; and
- To develop the student's ability to examine architectural issues rationally, logically, and coherently and to communicate architectural ideas in written, oral and visual forms.
- In addition, the intentions of the course are for the student to develop his/her own interpretation of the issues.

**Student Performance Criterion/a Addressed**
A.1 Professional Communication Skills

**Topical Outline**
Modeling and manipulating geometric constructs 50%
Parametric modeling 30%
Rendering 20%

**Prerequisites**
MARCH-621 Visualization 1 or permission of the M.Arch. program director

**Textbooks / Learning Resources**
Readings will either be handed out in class, on reserve in the library or available on the Course Blackboard Site.

**Offered**
Fall and spring semesters

**Faculty Assigned**
Kihong Ku, coordinator; J. Vaughn, J. Jackson, K. Blackwell, L. Oxenhandler

# Course Description

**MARCH-631 History 1: The Built Environment: Ancient to Medieval, 3 credits**

**Course Description**
World architecture, interiors, and landscape design from Ancient to Medieval. Major monuments examined as solutions to technical problems, utilizing available materials, and as embodiments of cultural belief systems.

**Course Goals & Objectives**

- The ability to gather, assess, record, and apply relevant information in architectural coursework.
- Provide a global perspective for design, so designers have a global view and weigh design decisions within the parameters of ecological, socio-economic, and cultural contexts.
- Distinguish, describe, and identify the parallel and divergent canons and traditions of architecture, landscape and urban design including indigenous, vernacular, local, regional, and national examples from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socio-economic, and cultural factors.
- Recognize and explain the social, political, and physical influences affecting historical changes in the design of the built environment – including movements and periods in interior design and furniture, movements and traditions in architecture, and movements and periods of art – so that entry-level designers can apply this knowledge within an historical and cultural context.
- Compare and discuss the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects and designers.
- Identify, describe, and analyze the relationships between human behavior, the natural environment, and the design of the built environment.

**Student Performance Criterion/a Addressed**
A.5 Ordering Systems
A.7 History and Global Culture
A.8 Cultural Diversity and Social Equity

**Topical Outline**
Organizing design principals 5%
Prehistoric cultures 10%
Early Cities South and West Asia 10%
Early Cities Egypt, the Mediterranean & America 15%
Ancient Greece and the Hellenistic World 20%
Ancient Rome and China 20%
Middle Ages 20%

**Prerequisites:**
Enrollment in the M.Arch. program or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Ching, Francis D.K., Mark Jarzombek and Vikramaditya Prakash. *A Global History of Architecture*. John Wiley & Sons, 2011.
Whiton, Sherrill and Stanley Abercrombie. *Interior Design & Decoration***.** Prentice-Hall, 2007.
Kleiner, Fred S. *Gardner's Art Through the Ages: A Global Perspective*. Wadsworth Cengage Learning, 2012.

**Offered**
Fall semester, annually

**Faculty Assigned**
David Breiner, coordinator; A. Price, L. Patterson, K. Jacobs

# Course Description

**MARCH-632 History 2 Built Environment: Renaissance & Baroque Architecture & Interiors, 3 cr.**

**Course Description**
This course highlights significant examples of architecture and interiors produced from the 14th through the mid-18th centuries.

**Course Goals & Objectives**

- Ability to communicate effectively about design, think critically, and to reach appropriate conclusions.
- The ability to research by gathering, assessing, recording, and applying relevant information in architectural coursework.
- Understanding the effects of the environment on human behavior and research methods used to further understanding of the interaction between the two.
- Understanding of the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition and urban design.
- Understanding of the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals, and the implication of this diversity for the societal roles and responsibilities of architects.
- Understanding of the Western and non-Western architectural canons and traditions in architecture, landscape, and urban design from the 14th through the mid-18th centuries, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them.
- Understanding of the shifts in the social, political, technological, ecological, and economic factors that shape the practice of architecture.

**Student Performance Criterion/a Addressed**
A.3 Investigative Skills
A.7 History and Global Culture

**Topical Outline**
The Renaissance 25%
Later Islamic Architecture, Ming Dynasty China 10%
Baroque Rome & The Baroque beyond Rome 25%
French Classicism 15%
Late Baroque & Rococo 10%
Revivals and the Picturesque 15%

**Prerequisites**
MARCH 631 History 1

**Textbooks / Learning Resources**
Ching, Francis D.K., Mark Jarzombek and Vikramaditya Prakash. *A Global History of Architecture*. John Wiley & Sons.
Whiton, Sherrill and Stanley Abercrombie. *Interior Design & Decoration*. Prentice-Hall.
Kleiner, Fred S. *Gardner's Art Through the Ages: A Global Perspective*. Wadsworth Cengage Learning.

**Offered**
Spring semester, annually

**Faculty Assigned**
David Breiner, coordinator; M. Livingston, A. Price, L. Patterson, C. Dragani

# Course Description

**MARCH-633 History 3 Built Environment: Early Modrn Arch. & Interiors, 1750-1930, 3 credits**

**Course Description**
This course chronicles the impact of Enlightenment thinking and of the shifting definitions of modernity upon architecture and interior design by tracing the transition from Historicism to the International Style.

**Course Goals & Objectives**

- Demonstrate an ability to gather, assess record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.
- Demonstrate an understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design, architectural composition, and urban design.
- In exams, a semester-long case study, and discussions, demonstrate their understanding of the (primarily) Western canons and traditions of architecture, landscape and urban design including indigenous, vernacular, local, regional, and national examples during the period 1750 to 1930, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them.
- Demonstrate an understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.
- Demonstrate their understanding of the relationship between human behavior and the physical environment.
- Develop the ability to describe, analyze and explain ideas that impact on the built environment.

**Student Performance Criterion/a Addressed**
A.3 - Investigative Skills
A.5 - Ordering Systems

**Topical Outline**
The Enlightenment and Neoclassicism 10%
Neoclassicism in America 10%
Radical Neoclassic: David, Ledoux, Boullée 10%
Picturesque, Romanticism and Gothic Revival 10%
Industrial Revolution & new technologies 20%
Arts and Crafts 10%
America and the City 10%
Art Nouveau, Werkbund, Expressnsm, Futurism, Constructivism 20%

**Prerequisites**
MARCH-632 History 2 or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Bergdoll, Barry. *European Architecture 1750-1890.* Oxford University Press.
Colquhoun, Alan. *Modern Architecture.* Oxford University Press.
Ching, Francis D. K., Mark Jarzombek, and Vikramaditya Prakash. *A Global History of Architecture.* Wiley.
Kleiner, Fred. S. *Gardner's Art through the Ages: A Global History.* Wadsworth Cengage Learning.

**Offered**
Fall semester, annually

**Faculty Assigned:** David Breiner, coordinator; S. Singletary, C. Dragani, A. Price

# Course Description

**MARCH-634 History 4 Built Environment: Modrn & Contemp. Arch. and Interiors, 3 credits**

**Course Description**
This course analyzes major movements and theoretical constructs that have dominated architecture and interior design from the post-World War II period until the present.

**Course Goals & Objectives**

- Develop an understanding of twentieth-century Western traditions in architecture, interior design, art, landscape, and urban design as well as the climatic, technological, socio-economic, and other cultural factors that shaped and sustained them.
- Demonstrate proficient written and oral skills in the visual analysis and cultural context of twentieth century design.
- Demonstrate the ability to make a comprehensive analysis and evaluation of a building, building complex, interior, or urban space.
- Develop an awareness of the theories and methods of inquiry that seek to clarify the relationships between human behavior and the physical environment.
- Develop an awareness of the diverse needs, values, behavioral norms, and social and spatial patterns that characterize different cultures, and the implications of this diversity for the societal roles and responsibilities of architects and designers.
- Demonstrate an understanding of the shifts which have occurred since the nineteenth century in the social, political, technological, ecological, and economic factors that shape the practice of architecture and design.

**Student Performance Criterion/a Addressed**
A.2 - Design Thinking Skills
A.8 - Cultural Diversity and Social Equity

**Topical Outline**
Bauhaus/Modernism/Internationalization & Utopian Ideals 15%
American architecture before WW2 10%
European and American Modernism after WW2 15%
Global Modernism 10%
Post-Modernism 15%
High-Tech and Deconstructivism 15%
Ecology and Sustainability 10%
Architecture in the 21st century 10%

**Prerequisites**
MARCH-633 History or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Cohen, Jean-Louis. *The Future of Architecture since 1889.* Phaidon Press.
Kleiner, Fred S. *Gardner's Art Through the Ages*: *A Global History.* Wadsworth.
Colquhoun, Alan. *Modern Architecture*. Oxford University Press.

**Offered**
Spring semester, annually

**Faculty Assigned**
David Breiner, coordinator; S. Singletary, A. Price

# Course Description

**MSARC-631 Architectural Research Methods, 3 credits**

**Course Description**
This seminar is focused on understanding independent research, inquiry, analysis, design exploration and synthesis in architecture.

**Course Goals & Objectives**

- Students will investigate, interpret and document different approaches to research, hypothesis testing, design processes, and systems for design.
- Students will demonstrate research results that will lead to the development of a comprehensive thesis project.
- Students will develop and prepare their research proposals for their thesis project.

**Student Performance Criterion/a Addressed**
A.3 Investigative Skills
C.1 Research

**Topical Outline**
Research methodologies 15%
Data collection and analysis methodologies 20%
Evidenced-based findings and conclusions 20%
Organizational strategy of final research 20%
Completion of all research and final document 25%

**Prerequisite**
Enrolled in the M.Arch. program or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Readings will either be handed out in class, on reserve in the library or available on the Course Blackboard Site.

**Offered**
Fall semester, annually

**Faculty Assigned**
James Doerfler

# Course Description

**SDN-601 Principles and Methodologies for Sustainable Design, 3 credits**

**Course Description**
Sustainability is a cultural phenomenon that is reshaping the way architects, engineers, designers and planners conceive of the built environment. This lecture/seminar course will explore changes in culture over the years that have led to the formation and adoption of contemporary sustainable design practices, technologies and processes. Current aspects of sustainability will be explored including the impact of the LEED rating system, legislation, environmental law, corporate culture evolution, integrated design process, energy modeling and economic impacts of land development. Students will complete a final paper on future directions in sustainable design at the end of the course.

**Course Goals & Objectives**
At end of this course students will:

- *Analyze* the origins and founding principles of sustainability.
- *Synthesize* the competing motivations of empathy and self-interest to build a foundation for a new sustainable world view.
- *Combine* the cultural, ecological, economic and experiential forces into holistic frameworks for sustainability.
- *Analyze* the state of the world's energy and environmental systems and *value* the critical role of built environment professionals in responding to that challenge.
- *Discover* the essential role of benchmarks, standards and rating systems in focusing successful sustainable design processes and effective documentation of built projects.
- *Identify* the critical methodologies used to achieve high levels of sustainability in the design and construction of the built environment including: Integrated project delivery; Integrated design. charrettes; Building simulation; Life cycle analysis; BIM; and Green construction practices
- *Recognize* the range of planning principles associated with eco-cities, eco-districts, eco-villages, and landscape ecologies.
  *Identify* emerging design influences including biophilia, biomimicry, urbiphilia (love of cities), de-materialization, and resilience.

**Student Performance Criterion/a Addressed**
A.2 Design Thinking Skills

**Topical Outline**
Principles for Sustainability 33%
Biodiversity and the Hydrologic Cycle /Soils, Water, and Vegetation 33%
Methodologies for Sustainable Design and Construction 33%

**Prerequisites**
MARCH-612 Design 2 or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Brown, Lester: *Plan B 4.0, Mobilizing to Save Civilization*

**Offered**
Fall semester, annually

**Faculty Assigned**
Rob Fleming

# Course Description

**SDN-623 Landscape Ecology Seminar, 2 credits**

**Course Description**
Students will identify, characterize and interpret the rich interplay between spatial landscape patterns and process including where it originates, why it matters and how it changes over time.

**Course Goals & Objectives**

- Define what landscape is and how it is spatially organized at varying scales.
- Describe various landscapes & spatial patterns from ecological, cultural and cognitive perspectives.
- Identify and interpret characteristics impacting landscape systems and ecological processes: structure, functioning and change over time.
- Identify and apply principles of landscape ecology to landscape planning, conservation and design processes.
- Collaboratively work in small groups to distinguish, define and illuminate landscape patterns and processes associated with the concurrent MSSD Sustainable Design Studio.

**Student Performance Criterion/a Addressed**
A.2 Design Thinking Skills

**Topical Outline**
Landscape Systems and Patterns 33%
Biodiversity and the Hydrologic Cycle /Soils, Water, and Vegetation 33%
Sustainable Landscape Design (Green Infrastructure) 33%

**Prerequisites**
MARCH-612 Design 2 or permission of the M.Arch. program director.

**Textbooks / Learning Resources**
Dramstad, W.E., J.D. Olson, and R.T.T. Forman. Landscape Ecology Principles in Landscape Architecture and Land-Use Planning. Island Press.
Leopold, A. 1949. A Sand County Almanac. Oxford Univ. Press, New York.
Perlman, D.L. and J.C. Milder. 2005. Practical Ecology. Island Press, Washington, DC.

**Offered**
Fall semester, annually

**Faculty Assigned**
Sarah Endriss

# Course Description

**MARCH-641 Technology 1: Materials and Methods, 3 credits**

**Course Description**
This course focuses on the presentation of the technical factors of construction that affect a building's structure.

**Course Goals & Objectives**

- Structural Systems: Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range and appropriate application of contemporary structural systems.
- Building Envelope Systems: Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
- Building Service systems: Understanding of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.
- Building Materials and Assemblies: Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

**Student Performance Criterion/a Addressed**
B.8 - Building Materials and Assemblies

**Topical Outline**
The architect's responsibilities 5%
Building and zoning codes 5%
Sustainability 5%
Site design 5%
Structural systems 15%
Mechanical Systems 15%
Architectural materials and methods 50%

**Prerequisites**
MARCH 601 Intro to Design with a grade of "C" or better and MARCH 602 Intro to Vis; or permission of M.Arch. Program Director.

**Textbooks / Learning Resources**
Allen, Edward, *Fundamentals of Building Construction.*
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated*

**Offered**
Fall semester, annually

**Faculty Assigned**
Craig Griffen, Chris Harnish, coordinators; S. Lee, A. Hart

# Course Description

**MARCH-642 Technology 2: Passive Systems and Building Enclosure, 3 credits**

**Course Description**
This lecture/lab course examines technological issues relevant to passive environmental systems and sustainable technologies.

**Course Goals & Objectives**
- Understand the principles of site grading and drainage; and the architects' responsibilities with respect to environmental and resource conservation in architecture and urban design.
- Understand the principles, conventions, standards, applications, and sustainable issues in the manufacture and use of construction materials, components, and assemblies.
- Develop an understanding of the philosophical and theoretical issues surrounding the development and application of environmental technology as well as their ability to articulate a position regarding its appropriate use and value (as differentiated from cost).

**Student Performance Criterion/a Addressed**
B.4 - Technical Documentation
B.6 - Environmental Systems
B.7 - Building Envelope Systems and Assemblies
B.8 - Building Materials and Assemblies

**Topical Outline**
The architect's responsibilities 5%
Building and zoning codes 10%
Sustainability10%
Site design 5%
Structural systems 20%
Mechanical Systems 20%
Architectural materials and methods 30%

**Prerequisites**
MARCH-641 Technology 1

**Textbooks / Learning Resources**
Ching, Frank. *Building Construction Illustrated.* Van Nostrand Reinhold.
Allen, Edward. *Fundamentals of Building Construction: Materials and Methods.* John Wiley & Sons.
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated*
AIA, Ramsey/Sleeper, *Architectural Graphic Standards*

**Offered**
Spring semester, annually

**Faculty Assigned**
Craig Griffen

# Course Description

**MARCH-643 Technology 3: Dynamic Environmental Systems, 3 credits**

**Course Description**
This lecture/lab course presents basic theory and application parameters associated with the dynamic building systems within the architectural environment.

**Course Goals & Objectives**

- Comprehension of the principles of sustainability in architecture and urban.
- Analyze and assess client and user needs, space and equipment requirements, site and design criteria, and relevant laws and standards and assess their implication for the project.
- Develop the student's ability to research, assess, select, configure and detail site, structural, environmental, building envelope, building service and life safety systems.
- Identify and describe the basic principles of life-safety systems with an emphasis on egress.
- Demonstrate an understanding of the principles of passive environmental systems' design
- Demonstrate the basic principles in the application of building envelope systems and assemblies
- Demonstrate the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.
- Identify and Describe building systems in support of maintaining human health and wellbeing within buildings.

**Student Performance Criterion/a Addressed**
B.6 - Environmental Systems
B.9 - Building Service Systems
B.10 - Financial Considerations
C.1 - Research

**Topical Outline**
Human comfort mapping and psychrometrics 10%
Electric lighting 15%
HVAC 15%
Fire protection 10%
Solar geometry and daylighting 20%
Envelopes, wall sections, thermal gradients 20%
Plumbing 10%

**Prerequisites**
MARCH-642 Technology 2.

**Textbooks / Learning Resources**
Grondzik, Kwok, Stein, Reynolds; *Mechanical and Electrical Equipment for Buildings,* John Wiley and Sons.
Allen, Edward. *Fundamentals of Building Construction: Materials and Methods.* John Wiley & Sons.
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated*
AIA, Ramsey/Sleeper, *Architectural Graphic Standards*

**Offered**
Fall semester, annually

**Faculty Assigned**
Matt Gindlesparger, David Kratzer

# Course Description

**MARCH-644 Technology 4: Advanced Building Analysis, 3 credits**

**Course Description**
This course presents advanced theory, design and application parameters associated with structures, environmental systems and enclosure within the architectural environment.

**Course Goals & Objectives**

- Projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.
- Principles of structure, environmental systems and building enclosure and the manner in which these building elements respond to environmental, contextual and programmatic design issues.
- The coordination of structural, environmental and building enclosure systems and the manner in which these building elements interrelate.
- Comprehension of the relationship between structure, environmental systems, and enclosures.
- Building systems technology as a form determinant.
- The role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

**Student Performance Criterion/a Addressed**

A.6 - Use of Precedents
B.5 - Structural Systems
B.6 - Environmental Systems
B.7 – Building Envelope Systems and Assemblies
B.8 - Building Materials and Assemblies
D.1 - Stakeholder Roles in Architecture

**Topical Outline**

Human comfort mapping and psychrometrics 10%
Electric lighting 15%
HVAC 15%
Fire protection 10%
Solar geometry and daylighting 20%
Envelopes, wall sections, thermal gradients 20%
Plumbing 10%

**Prerequisites**
MARCH-643 Technology 3.

**Textbooks / Learning Resources**
Grondzik, Kwok, et al, *Mechanical and Electrical Equipment for Buildings.*
Allen, Edward, *Fundamentals of Building Construction.*
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated.*
Deplazes, Andrea, *Constructing Architecture.*
AIA, Ramsey/Sleeper, *Architectural Graphic Standards*
Frampton, Kenneth, *Studies in Tectonic Culture*

**Offered**
Spring semester, annually

**Faculty Assigned**
Chris Harnish, David Kratzer

# Course Description

**MARCH-645 Technology 5: Documentation and Detailing, 3 credits**

**Course Description**
This course focuses on the important role of structural, environmental, and constructional systems in the design process through the creation of technically precise computer generated drawings and models.

**Course Goals & Objectives**
- The ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.
- Demonstrate an understanding of financial considerations such as the fundamentals of building costs, including acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.
- Demonstrate an understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
- Demonstrate an understanding of the basic principles and appropriate application and performance of building service systems.
- Demonstrate an understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.
- Ability to use Building Information Modeling technology as a design and representational media to convey essential geometric intent and technical information at each stage of the design process.
- Ability to assess, select, and conceptually integrate structural systems, building envelope systems, and environmental systems into building design.

**Student Performance Criterion/a Addressed**
B.4 - Technical Documentation
B.7 - Building Envelope Systems and Assemblies
B.8 - Building Materials and Assemblies
B.9 - Building Service Systems
B.10 - Financial Considerations

**Topical Outline**
Technical documentation 30%
Building envelope systems and assemblies 20%
Building materials and assemblies 20%
Building service systems 20%
Financial considerations 10%

**Prerequisites**
MARCH-644 Technology 4 and MARCH-622 Visualization 2.

**Textbooks / Learning Resources**
Distributed PDF files or through online sources; Autodesk Revit Architecture 2015

**Offered**
Fall and Spring semesters

**Faculty Assigned**
Kihong Ku, coordinator; S. Schmidt, C. Hemphill, S. Patchell

# Course Description

**MARCH-651 Structures 1, 3 credits**

**Course Description**
This course merges structural form and analysis as a simultaneous act and introduces the role of structural engineering in the architectural process

**Course Goals & Objectives**

- Develop the student's understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.
- Develop the student's understanding of the entire design process for a whole structure, starting with the formation of structural ideas and continue the development of structural ideas into workable solutions, preliminary design of details and preliminary determination of member sizes.
- Merge the fundamentals of statics and strength of materials naturally in the context of the structural design process.
- Design and analyze structures through graphical methods and numerical methods where needed in the design process.

**Student Performance Criterion/a Addressed**
B.5 - Structural Systems

**Topical Outline**
Loads, forces, vectors, and free body diagrams 5%
Static equilibrium, component of forces 5%
Mechanical properties of materials 20%
Arches and vaults 10%
Truss analysis 15%
Columns and beams 15%
Shear and moments 20%
Lateral loads 10%

**Prerequisites**
Completion of one-semester college-level courses in physics and introduction to calculus.

**Textbooks / Learning Resources**
Allen, Ed, Waclaw Zalewski and Boston Structures Group. Form and Forces Designing Efficient Expressive Structures. Wiley.
Schodek, Daniel and Martin Bechthold. Structures. Prentice Hall.
Scientific calculator, Tracing paper, green engineer's calculation pad, protractor, rolling ruler & decimal scale

**Offered**
Spring semester, annually

**Faculty Assigned**
Brian Billings, Jonathan Price (a faculty search is currently in process for a full-time faculty position, Structures)

# Course Description

**MARCH-652 Structures 2, 3 credits**

**Course Description**
This course presents the effect of cross-sectional properties on stresses in beams as well as the concept of bending as it is applied to beams, columns, slabs and walls in wood, steel and reinforced concrete.

**Course Goals & Objectives**

- Demonstrate the basic principles of structural behavior in resisting gravity and lateral forces and evaluate the evolution, range, and appropriate application of contemporary structural systems.
- Analyze and evaluate the entire design process for a whole structure, starting with the formation of structural ideas and continuing with the development of structural ideas into workable solutions, preliminary design of details and preliminary determination of member sizes.
- Merge the fundamentals of statics and strength of materials in the context of the structural design process.
- Design and analyze structures through graphical and numerical methods, as needed in the design process.

**Student Performance Criterion/a Addressed**
B.5 - Structural Systems

**Topical Outline**
Principal stresses, isostatics 5%
Structural framing 10%
Lateral loads 15%
Shear and moment diagrams 10%
Wood structural systems 20%
Steel structural systems 20%
Concrete structural systems 20%

**Prerequisites**
MARCH-651 Structures 1.

**Textbooks / Learning Resources**
Schodek, Daniel; Bechtold, Martin *Structures.* Prentice Hall.
Allen, Edward; Waclaw Zalewski and Boston Structures Group. *Form and Forces Designing Efficient Expressive Structures.* Wiley.

**Offered**
Fall semester, annually

**Faculty Assigned**
Brian Billings, Jonathan Price (a faculty search is currently in process for a full-time faculty position)

# Course Description

**MARCH-661 Professional Management, 3 credits**

**Course Description**
This course focuses on the nature of the architect's practice and on office proprietorship typologies, through detailed studies of legal, financial, marketing and management issues.

**Course Goals & Objectives**
- Students will evaluate and compare the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods.
- Students will comprehend the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.
- Students will analyze and elaborate upon the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.
- Students will investigate the architect's responsibility to the public and the client as determined by registration law, building and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.
- Students will evaluate the ethical issues involved in the formation of professional judgment regarding social political and cultural issues in architectural design and practice.
- Students will use the graphical, written, and oratory language of the architectural profession, and the representative materials used in employment applications and interviews.

**Student Performance Criterion/a Addressed**
D.1 - Stakeholder Roles in Architecture
D.2 - Project Management
D.3 - Business Practices
D.4 - Legal Responsibilities
D.5 - Professional Conduct

**Topical Outline**
The building project team 10%
Architectural firms and consultants, types 10%
Project delivery methods and management 30%
Contracts 20%
Licensure 15%
Legal and ethical responsibilities 15%

**Prerequisites**
MARCH-614 Design 5

**Textbooks / Learning Resources**
Required readings will be distributed through Blackboard.

**Offered**
Fall and Spring semesters

**Faculty Assigned**
James Doerfler, coordinator; J.Smith, A. Hoffman

## ii. Studio Culture Policy

First developed in 2010-2011, the document shown below is distributed to students at the beginning of each semester as well as posted in studio locations and on the College's website. The "Studio Culture" document is reviewed on a regular basis to assess its effectiveness and provide an opportunity for improvement.

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**Philadelphia University** **College of Architecture and the Built Environment**

# Studio Culture: RESPECT

This document is intended to create a current and clear description of student and professor expectations, requirements, and responsibilities. Every studio must take a moment at the commencement of the class to review, sign, and return this document to the CABE Executive Dean's Office, ensuring clear and universal understanding. Copies will be posted in all studio buildings. This is a dynamic document that must be evaluated annually by a committee of students and faculty. The Philadelphia University CABE Studio Culture Document works in conjunction with CABE Studio Policies, the Philadelphia University Student Handbook, and the Philadelphia University Strategic Plan.

Studio Culture, which promotes an active learning environment, is the essence of design education. Design students draw from all of their academic courses, life experiences, and extra-curricular activities; the importance of all of these sources should not be diminished. Above all, the fundamental component of our success is **RESPECT**.

### Respect for Ourselves

Students bring immense energy, talent, and dedication to the learning process. Faculty are highly qualified and experienced individuals who bring their skills and dedication to the learning process.

**Students learn as much from each other as they do in class; therefore, they are expected to work in studio frequently.**
An atmosphere of encouragement and positive reinforcement should be upheld.
Students need to strive to present the best work that they are capable of – only then can they excel.

**Students should be empowered to expand their knowledge by taking reasonable and appropriate intellectual risks.**

### Respect for One Another and Our Craft

We encourage one another to learn about, respect, and embrace all disciplines, as they bring important perspectives to the educational process.

**As part of the professional atmosphere both students and faculty must be punctual and respectful of one another, our schedules, and external obligations.**
While in class our focus and conversation must be pertinent to the class at hand.
Students and faculty are responsible for coming to class with new work prepared and ready for discussion.
Critiques and field trips that extend past class time must take into account students' other classes and extra-curricular responsibilities.

[continued on following page]

**Students should be aware that design studios demand a significant financial commitment. Professors should respect students' varying financial conditions, i.e. they should discuss general costs for the semester and be aware of material availability.**

**The course syllabus must be clear and encourage equitable standards across sections of the course.**
When assigning a project, faculty must explain and document modifications to the syllabus or predominant teaching method, and changes
must meet the learning objectives of the course.
All involved are encouraged to value process (theory, precedent, and research) and final product (both graphic and oral presentations).

**Effective ways to teach design include pin ups, group discussions, one-on-one desk critiques and integrated design charrettes.**

**Effective presentation techniques include hand-produced drawings and models, digital media, and well prepared oral presentations, and each should be used appropriately according to the circumstances.**

**Reviews will be a constructive, interactive learning experience.**
Faculty are encouraged to establish deadlines providing students enough time prior to the review to recuperate and prepare (a "Pencils-Down"
policy) to foster more interactive and effective critiques.
Faculty are encouraged to organize critiques so they enhance discussions and involve all students.
To promote collaboration and respect, students are required to attend and encouraged to participate in critiques of students in other majors
and years.
In order to make the most of everyone's time, guest jurors should be alerted of relevant project information and given an agenda.

**Grading systems will follow the prescribed schedule as outlined in the syllabus.**
Faculty should give verbal or written progress reviews within a reasonable time following each major assignment and an exit interview
should serve as the culmination of the semester.
Faculty are required to use the Starfish system to issue prompt and appropriate notification of unsatisfactory or failing grades.

## Respect for Facilities

The studio is the NEXUS of our collective energy and imagination.

**Studio space has been entrusted to students and faculty in order to advance learning and build an effective studio culture.**
Studios should be treated as a professional work space. Excessive noise and other inappropriate behavior do not belong in studio.
Studios are a communal area used by many students and should be treated accordingly by adhering to the CABE Studio Policies.

8.24.15

## iii. Self-Assessment Policies and Objectives.

Self-Study is a critical enterprise in the lifecycle of all institutions since it leads to institutional renewal through a process of data informed analysis and critique. The M.Arch program developed an assessment map incorporating NAAB SPC criteria in conjunction with the University's self-study plan and timeline for Middle States accreditation.
Link to the University's policies, objectives and other documents on self-assessment:
**http://www.philau.edu/about/middlestates/**

## iv. Policies on Academic Integrity for Graduate Students:

http://www.philau.edu/catalog/UniversityAcadPolicyProcedures/GradStudentAcademicPandP/index.html#AcadInt

For additional information see also: *Philadelphia University Student Handbook:*
http://www.philau.edu/studenthandbook/2014-2015/index.html

## v. Information Resources Policies Including Collection Development

The J. Paul Gutman Library is the primary information resource on campus. See **SECTION 3, I.2.4 Information Resources** for a detailed discussion of the Library.

**Gutman Library Mission and Vision:**
*Mission:* Gutman Library staff work collaboratively with the University community to ensure that students successfully achieve institutional learning outcomes. The Library develops, preserves, organizes, and makes accessible a variety of relevant physical and digital information resources which support the University's curricular, co-curricular, and research goals. *Vision:* Blend an outstanding physical and virtual presence, so that the library is valued as the premier academic information resource of the University.
Link to the Gutman Library statement on its mission, vision, and strategic plan:
http://www.philau.edu/library/About/mission.html

## vi. Policies and Procedures Relative to EEO/AA for Faculty, Staff, and Students:

Philadelphia University, an Equal Opportunity Employer (*FM*, 10.3).
The full policy is articulated in the *Employee Handbook*, 2.1.1.A. The University is a covered employer under the Family and Medical Leave Act of 1993 as Amended ("FMLA"); see section 2.2.7.
It is the policy of the University to employ, train, compensate, promote, and provide other conditions of employment without discrimination due to race, color, religion, national origin, sex, age, handicap, veteran status, sexual orientation, or other classification protected by federal, state or local law. See *EH,* 2.5.1.

Specific information above can be found in the *Philadelphia University Faculty Manual* online:
https://www.philau.edu/provost/documents/pdf/PhilaU%20Faculty%20Manual%20July%202015.pdf

and the *Philadelphia University Employee Handbook* online:
https://www.philau.edu/humanresources/facstaff/documents/Employee%20Handbook%2007-01-2014.pdf

See also: **SECTION 3. Compliance with the Conditions for Accreditation, I.2.1 Human Resources and Human Resource Development.** For additional documents, see also:
https://www.philau.edu/provost/documents/ and
https://www.philau.edu/humanresources/facstaff/index.html

## vii. Policies Regarding Human Resource Development Opportunities (sabbatical, research leave, and scholarly achievements).

The University and Architecture Program value faculty members' professional activity and achievement, and expect faculty to bring their professional development into the classroom, as expressed in the *Faculty Manual*, 21.2.3:
https://www.philau.edu/provost/documents/pdf/PhilaU%20Faculty%20Manual%20July%202015.pdf

See also: **SECTION 3. Compliance with the Conditions for Accreditation, I.2.1 Human Resources and Human Resource Development.**

## viii. Policies, Procedures, and Criteria for Faculty Appointment, Promotion, and Tenure

Criteria for new contracts, including tenure, and promotions are established by the *Faculty Manual:* https://www.philau.edu/provost/documents/pdf/PhilaU%20Faculty%20Manual%20July%202015.pdf
See also: **SECTION 3. Compliance with the Conditions for Accreditation, I.2.1Human Resources and Human Resource Development.**

## ix. Response to the Offsite Program Questionnaire

Currently there are no off-site program course options. However, it is envisioned that as the program matures, study-abroad or study-away opportunities will be available to M.Arch students.

# APPENDIX to the APR-IC

i. **NAAB Eligibility Decision Letter and Memorandum** [July 30, 2015]

ii. **The Plan for Achieving Initial Accreditation** [March 2015]

National Architectural Accrediting Board, Inc.

July 30, 2015

Stephen Spinelli, Jr., Ph.D.
President
Office of the President
Philadelphia University
4201 Henry Avenue
Philadelphia, PA 19144

Dear Dr. Spinelli:

NAAB

At the July 2015 meeting of the National Architectural Accrediting Board (NAAB), the board reviewed the *Application for Candidacy* for the Philadelphia University.

As a result, the proposed professional architecture degree program, **Master of Architecture** has been accepted as eligible for candidacy. A visit for initial candidacy has been added to the Visit List for spring 2016. This visit will be conducted under the provisions of the NAAB *2014* Conditions for Accreditation and Section 4 of the NAAB Procedures for Accreditation, *2015 Edition.*

The *Architecture Program Report for Initial Candidacy* (APR-IC) is due in the NAAB office 180 days before the date of the visit. The format and content of the *APR-IC* is described in detail in Sections 2 and 4 of the Procedures and in the Guidelines for Preparing an APR.

*1101 Connecticut Ave, NW*
*Suite 410*
*Washington, DC 20036*

tel *202.783.2007*
fax 202.783.2822
www.naab.org
*info@naab.org*

The Board wishes to express its support for newly-developing programs by encouraging administrators and faculty to take advantage of the resources available within the community of program administrators, department chairs, and deans represented by the Association of Collegiate Schools of Architecture. The annual ACSA Administrators Conference and the ACSA Annual Meeting can be a source of rich discussion and advice for institutions adding a second accredited program. Further, the NAAB offers a full range of programs and workshops at both of these conferences that may be of value to the faculty and administrators at Philadelphia University.

A letter with the name of the proposed chair for this visit will be forthcoming in late summer. Once the program approves the chair, you will be able to set the date for the visit.

If the program wishes to postpone its visit for initial candidacy to the fall of 2016, please submit a request at your earliest convenience.

Sincerely,

Shannon B. Kraus, FAIA, NCARB, MBA, FACHA
President-elect

cc: James Doerfler, Director
Judith Kinnard, FAIA, Eligibility Reviewer

Enc.

National Architectural Accrediting Board, Inc.

Date: June 26, 2015

MEMORANDUM FOR THE NATIONAL ARCHITECTURAL ACCREDITING BOARD

FROM: JUDITH KINNARD, FAIA
BOARD REPRESENTATIVE

SCOTT VEAZEY, AIA
BOARD REPRESENTATIVE

CASSANDRA PAIR
DIRECTOR, ACCREDITATION

NAAB

SUBJECT: Eligibility for Candidacy –Philadelphia University M. Arch (non-pre-professional degree plus 168 semester credit hours plus 30 graduate credits) and; (pre- professional degree plus 168 semester credit hours plus 30 graduate credits).

On April 1, 2015, Philadelphia University filed a completed application for candidacy for an accredited of Master of Architecture. This application was filed under the terms of the 2012 NAAB Procedures for Accreditation, Section 4.

*1101 Connecticut Ave, NW*
*Suite 410*
*Washington, DC 20036*

**tel** *202.783.2007*
**fax** 202.783.2822
www.naab.org
*info@naab.org*

The next step is to determine whether the proposed degree program is eligible for candidacy. The application was reviewed by a panel consisting of the director of accreditation and one additional member of the board. In order to ensure balance between practitioners and educators, and to avoid potential conflicts of interest, Scott Veazey, AIA, and Cassandra Pair, Director, Accreditation served as the second and third members of the panel.

The purpose of the eligibility review is three-fold:

- To confirm the program's understanding of the Conditions and Procedures as they pertain to the faculty, staff and students.
- To access the institutional commitment to the implementation of the Plan for Achieving Initial Accreditation.
- To access the institutional commitment to the physical, financial, human, and information resources for the program.

Upon completing the review, the reviewer is required to submit a memorandum to the NAAB Directors addressing four areas:

1. A review of the resources committed to the program
2. Commitment of the institution to implementation of the Plan for Achieving Initial Accreditation.
3. Assessment of the readiness of the program to complete a visit for initial candidacy.
4. Recommendation to the NAAB Board to accept or not accept the program as eligible for initial candidacy. The recommendation will also identify the length of time that should elapse before scheduling the initial candidacy visit.

**General Information:**

Philadelphia University currently offers an accredited 5-year B. Arch program and a non- accredited undergraduate pre- professional degree. The B. Arch program received its initial NAAB accreditation in 1997 and subsequent renewals in 2000, 2006, and 2012. The proposed

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National Architectural Accrediting Board, Inc.

M. Arch program is designed for students with undergraduate degrees in any field of study and offers advanced standing for students with undergraduate degrees in pre professional architecture or related design programs, such as interior design, historic preservation or industrial design.

The program emphasizes sustainable, integrated design and practice. This is intended to appeal to two markets: career changers who will be attracted by the 3 year program, and students with a 4-year degree in an architecture-related field such as its Architectural Studies, Interior Design, Landscape Architecture, or Construction Management degrees.

The 48 to 99 credit curriculum can be completed in two to three academic years. Advanced placement depends on previous education and experience. The Master of Architecture program is assembled using approximately 75% existing undergraduate and graduate courses. Elective courses will come from existing curricula in other master's programs: GeoDesign, Interior Architecture, Sustainable Design, and Construction Management, as well as cross-listed Architecture courses. Additional courses may be selected from other programs such as Engineering, Health and Business to leverage the strengths of each College and of the University at large.

Currently, the Architecture program, with approximately 350 undergraduate and graduate students, is one of the largest degree programs on campus and is housed in multiple buildings. Aligned with the University's traditions, the program focuses on providing a solid professional education for the next generation of architects aided by its associations with the Center for Teaching Innovation and Nexus Learning, study abroad programs, the internship program, service learning studios, and other opportunities, most notably the interdisciplinary opportunities provided by its context within in the new College of Architecture and the Built Environment.

In the fall of 2012, Executive Dean Barbara Klinkhammer and architecture program faculty began discussions on the feasibility of graduate degree programs in architecture. In June 2013, a report prepared by Hanover Research presented favorable evidence that Philadelphia University could support a post-professional M.S. Architecture program and a professional Master of Architecture program.

Sustainable design will be a key part of the M. Arch program that will include the "CABE (College of Architecture and the Built Environment) CORE" sequence of course offerings by the MS Sustainable Design Program that is a required CABE graduate programs' keystone. M. Arch students will take the 4-credit Sustainable Design Studio along with a 2-credit Landscape Ecology Seminar.

1. Review of Resources Committed to the Program

The M. Arch will have access to resources already in place for the accredited B. Arch program. These facilities and resources are assigned to the Architecture program and set up to support architectural education. The faculty is in place and is experienced teaching within the larger CABE objectives. The College has implemented many new Master degree programs that will provide additional physical and intellectual resources to support the M. Arch objectives.

Philadelphia University is committed to providing the resources required to develop successful master's degree programs by providing funding, space and faculty positions as well as recruiting, admitting, and retaining degree candidates. Through the efforts of the CABE Advancement Council, a group of benefactors (alums, local and regional practitioners, and industry leaders), the College has been able to successfully strategize and implement major

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initiatives and improvements to the College programs. These efforts are designed to support CABE's mission and core values as well as the M. Arch Program by assisting in:

- Student recruitment.
- Community-based projects to find strategies that result in creative solutions that will positively impact communities.
- Partnerships with industries, state and local agencies, community entities, and professional organizations for possible joint projects, grant opportunities and sponsorships.
- Helping fund new facilities and technologies (new studios, new studio furniture and computer monitors, Fall 2015/2016)
- Evaluating the program on a regular basis (a key to maintaining its currency and success).

In the event the M. Arch is not successful in either eligibility, candidacy, or accreditation the Program has indicated that it would offer the immediate opportunity to enrolled students to move into the B. Arch program with advanced standing.

Advanced standing would also be available in a graduate program of their choice such as the MS Architecture, MS Sustainable Design, MS Construction Management, MS GeoDesign, or MS Interior Architecture.

**Financial Resources**

Funding for the program will be derived from tuition income. A chart is provided that lists expenses versus income for the program as it advances through candidacy. No specific information on student scholarships was provided.

**Faculty Resources**

Because this proposed program builds on the existing B. Arch Program, many of the faculty are already in place. 75% of the courses will be either cross-listed with existing undergraduate courses or with existing graduate electives. One new studio faculty member per year is required to teach the studio component. The program has described its diversity plan for both faculty and students, yet all of the faculty listed appear to be male.

**Physical Resources**

The recently renovated SEED building will provide studio space for the graduate students. Other coursework will be pursued in the Architecture and Design building and other places on campus. The small cohort of anticipated students (8-10 per year) should be able to be accommodated in this manner.

2. Commitment of the Institution to the Implementation of the Plan for Achieving Initial Accreditation

The institution appears to be committed as this reinforces their mission and strategic plan. The existing professional undergraduate degree program and graduate degree programs in related disciplines will make implementation relatively straightforward.

National Architectural Accrediting Board, Inc.

3. Readiness of the program to Complete a Visit for Initial Candidacy Assessment of the Timeline Toward Initial Candidacy

The institution has admitted students into the summer program that is the first part of their proposed curriculum. This cohort will graduate in the spring of 2018. The initial accreditation visit would take place in the fall of 2018.

Respectfully submitted,

Judith Kinnard, FAIA

Scott Veazey, AIA

Cassandra Pair

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# NAAB

National Architectural Accrediting Board

Candidacy Application

# Master of Architecture

College of Architecture and the Built Environment
**Philadelphia University**

**The Plan for Achieving Initial Accreditation**
March 2015

**Master of Architecture | Philadelphia University**

## INSTITUTIONAL INFORMATION

### PRESIDENT OF THE INSTITUTION

**Dr. Stephen Spinelli, Jr., President**
4201 Henry Avenue
Philadelphia, PA 19144
President@PhilaU.edu | Tel: 215.951.2700

### CHIEF ACADEMIC OFFICER

**Dr. Randy Swearer, Provost and Dean of the Faculty**
4201 Henry Avenue
Philadelphia, PA 19144
Provost@PhilaU.edu | Tel: 215-951.2705

### HEADS OF ACADEMIC UNIT

**Barbara Klinkhammer, Dipl.-Ing., Executive Dean, College of Architecture and the Built Environment**
4201 Henry Avenue
Philadelphia, PA 19144
klinkhammerb@PhilaU.edu | Tel: 215-951-2828

**James Doerfler, AIA, Director of Architecture Programs, College of Architecture and the Built Environment**
4201 Henry Avenue
Philadelphia, PA 19144
doerflerd@philau.edu | Tel: 215-951-2896

### PROGRAM ADMINISTRATOR

**Donald Dunham AIA, Associate Director, Master of Architecture Program**
4201 Henry Avenue
Philadelphia, PA 19144
dunhamd@philau.edu | Tel: 215-951-2896

**Master of Architecture | Philadelphia University**

# The Plan for Achieving Initial Accreditation

## TABLE OF CONTENTS

[2012 NAAB Procedures (amended)/2014 NAAB Conditions]

PHILADELPHIA
UNIVERSITY

March 30, 2015

Andrea S. Rutledge, CAE, Hon. AIA
Executive Director
The National Architecture Accrediting Board (NAAB)
1101 Connecticut Avenue, NW, Suite 410
Washington, DC 20036

Dear Ms. Rutledge:

Philadelphia University (PhilaU) intends to seek candidacy for accreditation for a Master of Architecture degree (M.Arch). This first-professional degree graduate program will join and complement PhilaU's already-proven NAAB-accredited 5-year Bachelor of Architecture degree (B.Arch).

The Master of Architecture program is designed to prepare students for professional architecture practice. Our program is differentiated by a focus on sustainable design and technology skills; knowledge of project management; and collaborative experiences in an interdisciplinary educational environment.

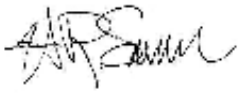
The Master of Architecture program leverages approximately 75% of existing undergraduate and graduate courses. Electives will come from existing curricula in other master's programs in the College of Architecture and the Built Environment (CABE), e.g. Geodesign, Sustainable Design, Construction Management, and Interior Architecture. In addition, courses may come from other PhilaU Colleges and Schools such as Design and Engineering, Health Sciences, and Business Administration.

The full program is between 48 and 99 credits and may be completed between two and three years, depending upon students' academic preparation. In summer 2015, foundation studios will be offered to and required for students with an earned bachelor's degree in a non-architecture field. In the fall 2015, the first cohort of students with earned bachelor's degrees in pre-professional architecture or related fields will begin.

The University is thrilled to add this important graduate program to our family of academic programs. Not only will the program expand our offerings, but it will bring diversity to our student body, enrich our teaching and learning community, and contribute well-prepared professionals to the field of architecture.

Accompanying this letter are the materials required by NAAB for candidacy application. We look forward to working with NAAB and continuing the process toward full accreditation.

Sincerely yours,



Randy Swearer, PhD
Provost and Dean of the Faculty

cc: Barbara Klinkhammer, Executive Dean and Professor, CABE

Enclosures

MIDDLE STATES COMMISSION ON HIGHER EDUCATION
3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501
www.msche.org

# STATEMENT OF ACCREDITATION STATUS

**PHILADELPHIA UNIVERSITY**
**School House Lane & Henry Avenue**
**Philadelphia, PA 19144**
**Phone: (215) 951-2700; Fax: (215) 951-2569**
**www.philau.edu**

**Chief Executive Officer:** Dr. Stephen Spinelli, Jr, President

## INSTITUTIONAL INFORMATION

**Enrollment (Headcount):** 2811 Undergraduate; 712 Graduate

**Control:** Private (Non-Profit)

**Affiliation:** None

**Carnegie Classification:** Master's - Larger Programs

**Approved Degree Levels:** Associate's, Bachelor's, Postbaccalaureate Certificate, Master's (MBA specialized in Textile and Apparel Marketing (online)), Post-Master's Certificate, Doctor's - Professional Practice (Doctor of Occupational Therapy), Doctor's - Research/Scholarship (PhD in Textile Engineering and Science);

**Distance Education Programs:** Fully Approved

**Accreditors Recognized by U.S. Secretary of Education:** Accreditation Commission for Midwifery Education; American Occupational Therapy Association, Accreditation Council for Occupational Therapy Education; National Association of Schools of Art and Design, Commission on Accreditation

**Other Accreditors:** National Architectural Accrediting Board; Council for Interior Design Accreditation; Accreditation Board for Engineering and Technology; Landscape Architecture Accreditation Board; Accreditation Review Commission on Education for the Physician Assistant; American Chemical Society;

### Instructional Locations

**Branch Campuses:** None

**Additional Locations:** Bucks County Campus, Trevose, PA

**Other Instructional Sites:** None

## ACCREDITATION INFORMATION

**Status:** Member since 1955

**Last Reaffirmed:** November 17, 2011

## Master of Architecture | Philadelphia University

## INTRODUCTION AND PROGRAM OVERVIEW

According to the Bureau of Labor Statistics, employment of architects is projected to grow 17% from 2012 to 2022, faster than the average for all occupations. The increased need for architects will result from current demographic trends: aging educational buildings, population shifts to the Sun Belt, additional healthcare facilities, nursing homes, and retirement communities. In addition, knowledge of sustainable (or "green") integrated design will be in demand due to rising energy costs and increased concern about the environment. Philadelphia University, through the College of Architecture and the Built Environment (CABE), has responded to this projected trend by developing the Master of Architecture program. Master of Architecture programs are a well-recognized educational path for professional architects, and have become even more popular in the recent past. The PhilaU program, particularly through the CABE core courses, emphasizes sustainable, integrated design and practice. This focus will appeal to two markets: career changers who will be attracted by the 3-year program, and students with a 4-year degree in an architecture-related field such as our own Architectural Studies, Interior Design, Landscape Architecture, or Construction Management degrees.

Philadelphia University's Master of Architecture Program is a first-professional graduate degree program designed to prepare students for the new challenges of professional architectural practice in the 21st century through the development of high-level sustainable design and technology skills, knowledge of project management and innovative delivery methods, and collaborative experiences in an interdisciplinary environment. This graduate program will join and complement the already proven NAAB accredited PhilaU 5-year Bachelor of Architecture program.

The M.Arch program is designed for students with undergraduate degrees in any field of study and offers advanced standing for students with undergraduate degrees in pre-professional architecture or related design programs, such as interior design, historic preservation or industrial design.

The 48 to 99 credit curriculum can be completed in two to three academic years. Advanced placement depends on previous education and experience. The Master of Architecture program is assembled using approximately 75% of our existing undergraduate and graduate courses. Elective courses will come from existing curricula in other master's programs: GeoDesign, Interior Architecture, Sustainable Design, and Construction Management, as well as cross-listed Architecture courses. Additional courses may be selected from other programs such as Engineering, Health and Business to leverage the strengths of each College and of the University at large.

Beginning in Summer 2015, two foundation studios will be offered to the first cohort of students with an earned bachelor's degree in a non-architecture field. In the Fall of 2015, the first cohort of students with an undergraduate degree in pre-professional architecture or related field will begin the program.

The Master of Architecture program will benefit from the ongoing study of interdisciplinary academic model at Philadelphia University. The facilities and technological requirements will develop and evolve as this program matures. The nature of this program will demand a real-time response to the needs of the industry and the individual student. This dynamic will influence the physical and technological requirements of the program over time.

The Master of Architecture program is a graduate program with a professional bias and outcome. The general profile of these students are post-graduates including those with some professional working experience. The courses are structured to support integrated and experiential learning combined with the students' academic and professional experience.

# **PART ONE** Program Analysis

## I INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

### PART ONE/I: SECTION I: Identity and Self-Assessment

1.1 History and Mission

**History of Philadelphia University**

Philadelphia University was founded in 1884 as the Philadelphia Textile School in the wake of the 1876 Centennial Exposition. Led by Theodore Search, a group of textile manufacturers noticed a sizable gap between the quality and variety of American textile products and those displayed by European mills. To address this, the group established the School to educate America's textile workers and managers. The Philadelphia Textile School entered a period of growth at the outset of World War II, when it was granted the right to award baccalaureate degrees and changed its name to the Philadelphia Textile Institute. Following the war, it moved to its present site in the East Falls section of Philadelphia. Continued growth led the institute to become the Philadelphia College of Textiles & Science (PCT&S) in 1961. Over the decades, the campus grew through the acquisition of adjacent properties, and academic offerings expanded to include programs in the arts and sciences, business administration, and architecture and design. Reflecting the institution's breadth and depth, in 1999 the College was granted university status by the Commonwealth of Pennsylvania and became Philadelphia University. The most recent academic reorganization of the University, in July 2011, resulted in the creation of three colleges: the College of Architecture and the Built Environment (formerly the School of Architecture); the College of Design, Engineering and Commerce (formerly the Schools of Design + Media, Engineering and Textiles, and Business Administration); and the College of Science, Health and the Liberal Arts (formerly the Schools of Science and Health and of Liberal Arts). The current University mission is presented in the *Employee Handbook* (*EH*, revised 6/2014):

*"Philadelphia University is a student-centered institution that prepares graduates for successful careers in an evolving global marketplace. By blending the liberal arts and sciences, professional studies, interdisciplinary learning, and collaborations in and out of the classroom, students learn to thrive in diverse and challenging environments. Our students are encouraged to form supportive relationships with each other as well as faculty, staff, and alumni in an academically rigorous setting that is focused on intellectual and personal growth. Philadelphia University is an experiential learning community where integrity, creativity, curiosity, ethics, responsibility, and the free exchange of ideas are valued."* (*EH*, 1.2)

All faculty are evaluated annually on their contributions to the University's seven strategic initiatives, ensuring that the initiatives are integrated into the daily life of the University community. The strategic initiatives are:

- Formalize the Philadelphia University "Signature Learning" (now called "Nexus Learning") to distinguish the university's educational experience.
- Promulgate an academic learning community that will embrace the key elements of the design, engineering, and commerce curricula where constant collaboration and teamwork are the keys to creating successful leaders.
- Advance applied research to serve signature learning, industry, and societal needs.
- Invest in academic strengths to create leaders in the professions.
- Provide, increase, and enhance distinctive opportunities for graduate and professional students.
- Develop innovative facilities to enhance 21st century learning.
- Integrate student coursework with purposeful and intentional learning outside the classroom.

The University is accredited by the Middle States Association of Colleges and Schools (MSACS) and other discipline-specific organizations such as the National Architectural Accrediting Board (NAAB), and is a member of the American Council on Education, the College Entrance Examination Board, and the Pennsylvania Association of Colleges and Universities.

**History of the Architecture Program**

Traditionally strong in textile engineering and science, PCT&S began expanding its design programs based on the technical foundations within those fields. The Architecture Program evolved from a single interior design

course started in 1980 as a service to the textile-related programs. Eventually this led to the Interior Design Program as a full-time day program leading to a Bachelor of Science degree in 1985. The College introduced the Bachelor of Architecture Program in 1991 under the leadership of Program Director Gary Crowell, AIA. Over the next 14 years, Prof. Crowell served as the chair of the Department of Architecture and Interior Design, then Dean of the School of Architecture + Design, and until 2007, Dean of the School of Architecture. With Prof. Crowell as Architecture Program Director, the program received its initial NAAB accreditation in 1997 and subsequent renewals in 2000, 2006, and 2012.

In 2007 the positions of Dean and Architecture Program Director were divided between two people and over the next four years additional administrative positions were created: Associate Dean, Assistant Dean for Graduate Programs, and Manager of Academic Operations. Those changes were partly in response to the NAAB self-study process and site visit team observations and reflect the growth in program size, the number of related programs, and the continued evolution of the institution and campus-wide strategic planning. The Interior Design and Architecture programs' immediate progeny are the undergraduate programs in Architectural Studies, Graphic Design Communication, Industrial Design, Digital Design, Landscape Architecture, and Construction Management, and graduate programs in Sustainable Design, GeoDesign, Construction Management, and Interior Architecture. The School of Architecture was elevated to a College of Architecture and the Built Environment as part of an institutional restructuring in 2011, and is now headed by Executive Dean Barbara Klinkhammer. In December 2010, the full-time faculty of the architecture program approved an updated mission statement, which is included in the 2014-15 academic catalog:

*"The Architecture Program at Philadelphia University prepares students to engage critically in the complex discourse of architectural practice and theory. In keeping with the University's legacy of craft, materials, and technology, the curriculum balances the creative and technical aspects of making architecture. Through research, analysis, and exploration, students discover that design is found at the dynamic intersection of our social and physical environments. Faculty with diverse perspectives guide students in their investigations of contemporary issues that supersede trends. Encouraged by interdisciplinary study, they craft varied ideas for the environment, finding passion and delight in the consideration of architecture*."

Currently, the Architecture Program, with approximately 350 undergraduate and graduate students, is one of the largest degree programs on campus and is housed in multiple buildings. Aligned with the University's traditions, the Program focuses on providing a solid professional education for the next generation of architects aided by its associations with the Center for Teaching Innovation and Nexus Learning, study abroad programs, the internship program, service learning studios, and other opportunities, most notably the interdisciplinary opportunities provided by its context within in the new College.

In the fall of 2012, Executive Dean Barbara Klinkhammer and architecture program faculty began discussions on the feasibility of graduate degree programs in architecture. In June 2013, a report prepared by Hanover Research presented favorable evidence that Philadelphia University could support a post-professional M.S. Architecture program and a professional M.Architecture program. In 2013, Professor Jim Doerfler was recruited to Director of Architecture Programs. In 2014, he expanded graduate offerings further with a Master of Science in Architecture program that fuses design, engineering and industry, emphasizing market-driven innovation. Also in 2014, Professor Doerfler named Professor Donald Dunham as M.Arch. Associate Director to assist in the development and University approvals of curricula, student recruitment, and coordination of the accreditation process for a Master of Architecture program.

**The Master of Architecture Program**
The M.Arch. degree will prepare students for professional architectural practice, through the development of sustainable design and technology skills, knowledge of project management, and collaborative experiences in an interdisciplinary environment.

Specific program outcomes include:

- Recruiting, admitting, and retaining highly motivated, academically capable degree candidates with a diversity of cultural and life experience backgrounds.
- Maintaining and enhancing a curriculum based on CABE core values of collaboration, innovation, and sustainability.
- Applying an integrated design process that synthesizes ecological and social responsibility, cultural significance, design excellence, and economic viability.

- Learn and incorporate into the planning and design process innovative technologies including Building Information Modeling (BIM), GIS/advanced spatial modeling, and Integrated Project Delivery (IPD).
- Participate in applied research to expand the knowledge of the discipline.
- Engage in experiential community-based projects to find strategies that result in creative solutions that will positively impact communities.
- Pursue partnerships with industries, state and local agencies, community entities, and professional organizations for possible joint projects, grant opportunities, and sponsorships.
- Graduate students who will be responsible professionals and become leaders in the field. This degree will also allow graduates to be eligible to sit for the Architect Registration Exam, a key component along with the architectural internship that leads to professional licensure.

**The University and the Architecture Program**
Today, due in part to the several design programs which grew out of Architecture and Interior Design, nearly one-half of the University student population is studying design. The Architecture faculty has collaborated with colleagues across the University to foster interdisciplinary activities. In addition, the College engages the University and adjacent neighborhood communities through exhibitions, lectures, and various studio-based research and design projects.

The seven initiatives that provide the outline of Philadelphia University's strategic plan are provided below with notes describing how the Master of Architecture builds upon these themes.

*i. Formalize the Nexus Learning Approach:* Nexus Learning is the University's signature learning approach with engaged, collaborative, active learning that is infused with real world issues. The design studios and core courses support the Nexus learning objective of Active Learning, the strongest learning objective supported by this program is Collaborative Learning. It is the intention to have several M.Arch. design studios in the sequence participate in collaborative projects with students working in other majors across the College as well as the University. The program will utilize courses from the Architecture and Sustainable Design programs with the expectation that students will take elective courses from the Construction Management, GeoDesign, Interior Architecture, and Landscape Architecture programs; consequently, students will interact with a range of disciplines. In general, there is a strong potential for interdisciplinary research and design opportunities across Colleges under the umbrella of this degree program.

*ii. Achieve innovation:* The Master of Architecture Program will practice innovation through the CABE mission of innovation, collaboration, and sustainable practice. Collaborative, interdisciplinary think-tank programs such as "Nexus Maximus" spawn innovation. This program will be the embodiment of inter-college collaboration.

*iii. Advance Applied Research:* The Master of Architecture provides opportunity for students( and faculty) to participate in a broad range of applied research with both agency and industry-sponsored support. Similar to the MS Architecture program, students will also be able to work on both theoretical/basic and applied research.

*iv. Invest in Academic Strengths:* The Master of Architecture Program strengthens the already proven Architecture Program by furthering connections to local industry and allowing for additional research partnerships. In addition, it will also provide more reciprocal relationships with local, regional, national, and international architects and academics as our graduates enhance and expand their professional and academic networks.

*v. Build Graduate and Professional Programs:* The Master of Architecture fits the strategic plan initiatives that support regional leadership in career-oriented graduate programs. This program supports the six key areas:

a. Multidisciplinary, integrated, differentiated, quality-focused and globally-oriented.
b. Professional education in fields that need graduates and involves interactions with the professions.
c. Grounded in scholarship, research, and practice that is basic and applied, professional and practical, and linked directly the professional world.
d. Program leaders are responsible for the impacts of investments and their responsibility is consequential.
e. Delivered in a student-centered framework where academic life, student life and University services are integrated.

f. Delivered in the context of the nexus learning model that is dynamic and evolving as the professions change and develop.

*vi. Develop Innovative Facilities:* The Master of Architecture program will benefit from the interdisciplinary academic model at Philadelphia University. The facilities and technological requirements will develop and evolve as this program matures. The nature of this program will demand a real-time response to the needs of the industry, the concentration and the individual student. This dynamic will influence the physical and technological requirements of the program over time.

*vii. Integrate Curricular and Co-Curricular Learning:* The Master of Architecture program is a graduate program with a professional bias and outcome. The general demographic profiles of these students are mature post-graduates including those with some professional working experience. The courses are structured to support integrated and experiential learning combined with the students' academic and professional experience.

## 1.2 Learning Culture

**Location**
Philadelphia University offers an intimate campus, sitting on the edge of Philadelphia's Fairmount Park while also being in close proximity to downtown Philadelphia. Both the natural and urban settings provide "living laboratories" for students' academic growth, which is also a large draw for student's applying to an architecture program.

**Teaching + Advising**
Although Philadelphia University is a relatively small institution, it prides itself on high quality teaching. Class sizes are kept small to encourage interaction between faculty and students, and among students themselves. In the B.Arch. program, classes are capped at 30 students, foundation studies courses at 15 and upper level studios at 12. The M.Arch. program will also maintain these numbers. Every student is assigned an academic advisor upon arrival to the University. The advisors are full time architecture faculty, with a breadth of knowledge not only about the Architecture Program, but the university at large. Advisors are encouraged to become acquainted with the students, learn their backgrounds, follow their academic performances, discuss their progress, and assist in charting their progress through the University by counseling them regarding the courses they are to take each semester, as they progress towards graduation.

**Participation**
The Architecture Programs administrators, faculty, staff, and students are involved in the ongoing policy initiatives of the University. They populate the membership of groups from standing committees to task forces. For example, in July 2013, Susan Frostén, Associate Professor in the College of Architecture and the Built Environment, became the Associate Provost. Susan is a central participant in major academic planning efforts at the University, including the Academic Growth Plan, new program development, online initiatives and serving as liaison with the deans, faculty, and faculty governance bodies to support and advance academic planning efforts.

**Learning**

*STUDIO*
Experiences within the studio are the backbone to the M.Arch. degree program. The culture that is encouraged and maintained in the studio supports the academic goals set out by each studio instructor. The College of Architecture and the Built Enivironment's "Studio Culture" document is the result of a student-faculty collaboration that extended over two semesters (see document on next page). From fall 2010 to spring 2011, a student-faculty committee was chaired by the Architecture Program Director and included two students, three full-time faculty – representing Architecture, Interior Design, and Landscape Architecture – and one adjunct faculty. This document is handed out to students at the beginning of each semester, as well as posted in studio locations and on the College's website. The "Studio Culture" document will be reviewed on a regular basis to assess its effectiveness and provide an opportunity for improvement.

**Philadelphia University** College of Architecture and the Built Environment

# Studio Culture

This document is intended to create a current and clear description of student and professor expectations, requirements, and responsibilities. Every studio must take a moment at the commencement of the class to review, sign, and return this document to the Dean's Office, ensuring clear and universal understanding. Copies will be posted in all studio buildings. This is a dynamic document that must be evaluated annually by a committee of students and faculty, with the input of the School of Architecture Advisory Board. The Philadelphia University Studio Culture Document works in conjunction with Studio Policies, the Philadelphia University Student Handbook, and the Philadelphia University Strategic Plan.

Studio Culture, which promotes an active learning environment, is the essence of design education. Design students draw from all of their academic courses, life experiences, and extra-curricular activities; the importance of all of these sources should not be diminished. Above all, the fundamental component of our success is **RESPECT**.

## Respect for Ourselves

Students bring immense energy, talent, and dedication to the learning process. Faculty are highly qualified and experienced individuals who bring their skills and dedication to the learning process.

**Students learn as much from each other as they do in class; therefore, they are expected to work in studio frequently.**
An atmosphere of encouragement and positive reinforcement should be upheld.
Students need to strive to present the best work that they are capable of – only then can they excel.

**Students should be empowered to expand their knowledge by taking reasonable and appropriate intellectual risks.**

## Respect for One Another and Our Craft

We encourage one another to learn about, respect, and embrace all disciplines, as they bring important perspectives to the educational process.

**As part of the professional atmosphere both students and faculty must be punctual and respectful of one another, our schedules, and external obligations.**
While in class our focus and conversation must be pertinent to the class at hand.
Students and faculty are responsible for coming to class with new work prepared and ready for discussion.
Critiques and field trips that extend past class time must take into account students' other classes and extra-curricular responsibilities.

**Students should be aware that design studios demand a significant financial commitment. Professors should respect students' varying financial conditions, i.e. they should discuss general costs for the semester and be aware of material availability.**

**The course syllabus must be clear and encourage equitable standards across sections of the course.**
When assigning a project, faculty must explain and document modifications to the syllabus or predominant teaching method, and changes must meet the learning objectives of the course.
All involved are encouraged to value process (theory, precedent, and research) and final product (both graphic and oral presentations).

**Effective ways to teach design include pin ups, group discussions, one-on-one desk critiques and integrated design charrettes.**

**Effective presentation techniques include hand-produced drawings and models, digital media, and well prepared oral presentations, and each should be used appropriately according to the circumstances.**

**Reviews will be a constructive, interactive learning experience.**
Faculty are encouraged to establish deadlines providing students enough time prior to the review to recuperate and prepare (a "Pencils-Down" policy) to foster more interactive and effective critiques.
Faculty are encouraged to organize critiques so they enhance discussions and involve all students.
To promote collaboration and respect, students are required to attend and encouraged to participate in critiques of students in other majors and years.
In order to make the most of everyone's time, guest jurors should be alerted of relevant project information and given an agenda.

**Grading systems will follow the prescribed schedule as outlined in the syllabus.**
Faculty should give verbal or written progress reviews within a reasonable time following each major assignment and an exit interview should serve as the culmination of the semester.
Faculty are required to use the Academic Alert system to issue prompt and appropriate notification of unsatisfactory or failing grades.

## Respect for Facilities

The studio is the nexus of our collective energy and imagination.

**Studio space has been entrusted to students and faculty in order to advance learning and build an effective studio culture.**
Studios should be treated as a professional work space. Excessive noise and other inappropriate behavior do not belong in studio.
Studios are a communal area used by many students and should be treated accordingly by adhering to the School Studio Policies.

*NEXUS LEARNING*

Philadelphia University recently defined and developed Nexus Learning, a campus-wide program to promote interdisciplinary work. The program is known as the PhilaU "X-Factor" because it crosses active, collaborative, real-world learning and with a strong liberal arts foundation. Although the M.Arch. students will have already completed their liberal arts core at a prior institution, the energy and collaboration sparked by Nexus Learning will greatly affect their academic experience. Collaboration with other College and University programs is commonplace and will be incorporated into the M.Arch. program.

*ORGANIZATIONS + PROFESSIONAL SOCIETIES*

Through the Student Government Association and other co-curricular efforts, students have multiple ways of creating a larger sense of community and of impacting University policies and practices. Philadelphia University's B.Arch. Program has a maintained a strong chapter of the AIAS, which will offer opportunities for

the M.Arch. students to engage in conversation with fellow students of Architecture throughout the country. For other student co-curricular organizations and opportunities, see **PART ONE/I: SECTION 2: Resources 2.1 Human Resources and HR Development: Resources to Support Student Learning.**

**Harassment and Discrimination**
*"Philadelphia University complies with Title IX of the Education Amendments of 1972, the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964, and all other applicable federal, state, or local laws regarding unlawful discrimination. Philadelphia University prohibits discrimination on the basis of ethnicity, national origin, ancestry, race, color, religion, creed, sex, marital status, sexual orientation, gender identity, age, disability, veteran status, and any other characteristic protected by state law, federal law, or local ordinance in hiring, employment opportunities, education programs, and any other activities sponsored by the University. Furthermore, the University does not tolerate or condone any form of sex discrimination, sexual harassment or sexual violence. Any unlawful employment discrimination, sexual harassment or sexual violence perpetrated by administrators, faculty, staff, students, employees, independent contractors, vendors, or any other third-parties involving members of the Philadelphia University Community is a violation of this policy. Once the University has notice of an incident involving unlawful discrimination, the University will take prompt and appropriate steps to investigate the incident. Thereafter, the University will take remedial action to address confirmed incidents of unlawful discrimination a, and will use measures reasonably calculated to end any harassment, eliminate a hostile environment (if one was created), and prevent any future harassment." (Employee Handbook,* 2.5.1.D)

The *Student Handbook (SH)* also refers to the non-discrimination policy and can be read here: http://www.philau.edu/studenthandbook/2014-2015/nondiscrimination.html.

Students wishing to file a grievance against faculty, staff, or administrator for a non-academic and/or non-harassment issue are encouraged to communicate directly with the office(s) or person(s) with whom they have the grievance in order to resolve the issue; however, if they feel that the issue has not been adequately resolved or if they need additional support or feel threatened, they may seek counsel from the Office of the Dean of Students which investigates the matter and works toward a solution. The Office of the Dean of Students is responsible for the administration of the University Judicial System and coordinates crisis management.

Since harassment threatens a professional learning and working environment because it compromises institutional integrity and negates traditional academic values, it is University policy to investigate promptly and attempt to resolve any allegations of harassment. The grievance procedures (informal and formal complaints) for students are explained in the *Student Handbook* and can be accessed at the following link: http://www.philau.edu/studenthandbook/2014-2015/studentlifepolicies/grievances.html. Informal, confidential counseling by suitably trained individuals is available to students, staff or faculty members who feel they are a victim of harassment.

**Academic Integrity**
The community Code of Conduct (with explanation of Disciplinary Action) and the Code of Ethics are presented in the *Employee Handbook* section 2.5.12. The University's Community Standards seek the promotion of a civil and safe environment for all community members and the University Judicial System enforces that through various means: professional staff members of the Division of Student Life, Dean's Committee, faculty, and the Student Conduct Committee.

Specifically with regard to academic dishonesty, "all members of the Philadelphia University learning community are entrusted with respecting and maintaining its Academic Integrity Policy (hereafter referred to as "AIP"), whether instruction occurs in-person, online or hybrid. Violations are taken very seriously, as the AIP reinforces the values of original thinking and the recognition of the effort and work of others. Anyone violating this trust harms not only themselves but also the whole learning community (students, faculty, and staff), and the rights of all members of the University and professional communities are compromised" (2014-2015 Student Handbook, *Graduate Student Academic Policies and Procedures).*

Academic dishonesty is defined by the broad categories of cheating (the inappropriate and unacknowledged use of materials, information, designs, ideas or study aids in any academic exercise; and/or selling or

transferring tests or other assignments including designs); fabrication (falsifying or inventing any information or citation in an academic work); plagiarism (the representation of the words or ideas of another as one's own in any academic exercise); facilitating academic dishonesty (knowingly or negligently); and denying others access to information or material (stealing or defacing library holdings, altering computer files, etc.).

All University syllabi include a section on academic integrity. The University has adopted policies that both emphasize the imperative of academic integrity, but also protect the rights of all members of the University community. More information may be found at the following: *http://www.philau.edu/catalog/UniversityAcadPolicyProcedures/GradStudentAcademicPandP/index.html#AcadInt*.

To graduate, graduate students must pass all required courses (for the M. Arch curriculum presented in this document, 48 credits) and have a cumulative grade point average of 3.0 or higher.

## 1.3 Social Equity

**Social Equity**
"Philadelphia University is fully committed to making diversity an integral part of its mission. Creating a truly pluralistic community requires continuous effort. To make it happen, each member of the community must strive to work and learn together in an atmosphere of understanding and acceptance. Today's Philadelphia University community is founded upon multicultural opportunity. It is committed to cultural diversity, and the principles of openness, positive self-identity and fair play. The University community respects the uniqueness and worth of each member, based on mutual sensitivity, responsiveness and civility. Our vision sees enlightened students, faculty, administrators, staff, alumni and trustees living together in harmony, in ways that set an example of a just and humane society." (2014-2015 Student Handbook, *Commitment to Diversity, http://www.philau.edu/studenthandbook/2014-2015/diversity.html*)

Co- and extra-curricular activities have a role as well in this regard. The Student Development Office has several programs that address diversity and social justice, including: LEAD (Leadership, Engagement, Assessment, Development), a co-curricular certificate program designed for upper-class students looking for leadership development opportunities that will contribute to their personal development and help achieve their leadership potential; a Safe Zone program for gay, lesbian, bi-sexual, and transgendered (GLBT) students and their allies.

Achieving diversity within the Architecture Program is a goal bolstered by efforts to bridge the College with local organizations dedicated to minorities in design. In the Spring of 2011, working with Elizabeth Bramwell, the Northeast region's University Liaison for the National Organization of Minority Architects (NOMA), the Program Director was able to identify a core group of minority students interested in helping to resurrect our program's involvement after several years of inactivity. In the Fall of 2014, Philadelphia University was the Official Host and Chapter Party Sponsor for the NOMA Conference, which further highlighting the commitment from the college to recruit and maintain minority students.

Furthermore, as part of academic planning, the Provost is working with the educational consulting firm Educational Advisory Board to analyze the current body of the faculty, its distribution, and faculty-student ratios. The University recognizes the pressing need to increase and diversify the number of full-time faculty in terms of age, race, gender, ethnicity, scholarship, and expertise. Two of three recently hired full-time Architecture Program faculty have been minority members, which is testament to the goal of increased diversity. When recruiting part-time faculty, the Program Director similarly seeks to increase diversity in terms of race, ethnicity, and gender.

## 1.4 Defining Perspectives

As part of the College of Architecture and the Built Environment, the Master of Architecture program is bound by the CABE pedagogical philosophy which aligns with NAAB's 2014 Conditions for Accreditation "perspectives." The College of Architecture and the Built Environment Guiding Principles, Vision, and Mission:

***Guiding Principles:*** *With a commitment to educating the next generation of leaders for a sustainable future, the College of Architecture and the Built Environment's guiding principles include: Sustainability, Innovation, Interdisciplinary Collaboration, Social and Ethical Responsibility, Stewardship of the Environment, Design Excellence and Creativity, Global Perspective, Cultural Diversity*

***Vision:*** *To be recognized as the educational leader in sustainable integrated design and practice.*

***Mission:*** *Through innovation and interdisciplinary collaboration, the College of Architecture and the Built Environment is committed to educate the next generation of leaders for a sustainable future.*

We are committed to providing:

- The PhilaU Nexus Learning approach that includes an active, collaborative, real-world experience, informed by applied research and critical inquiry infused with the liberal arts.
- An educational environment that encourages entrepreneurship and innovation.
- A unique combination of disciplines providing an unparalleled opportunity for interdisciplinary collaboration.
- A student-centered approach to a professional education taught by highly accomplished faculty.
- A balance between theory and practice with a focus on design excellence and making.
- Curricula structured to acquire the knowledge and skills necessary for global sustainable practice.
- Engagement with the professional community and industry partners in one of the greatest cities in North America.

COLLABORATION AND LEADERSHIP

Philadelphia University has fostered collaboration across the University. This has been accomplished through the professional and liberal-arts-based realms so all members help develop new knowledge. Philadelphia University offers all its students a blend of professional and liberal education, crafted in such a way as to have the two strands reinforce one another. The undergraduate Hallmarks Program (formerly College Studies) helps prepare students to be leaders in their field. *The Hallmarks Program for General Education at Philadelphia University empowers students to:*

- *Question, based on curiosity and confidence*
- *Adapt, based on contextual understanding and global perspective*
- *Contribute, based on empathy and collaboration*
- *Act, based on initiative and ethical reflection with the goal of imagining and realizing better futures.*

Within that framework, undergraduate and graduate programs have leveraged this challenge. Collaborative, interdisciplinary, and individual self-directed projects have transformed the University learning environment. Architecture faculty are committed to the University's focus on quality teaching. In the last decade, several faculty have been awarded one of two competitive prizes – the President's Award for Teaching Excellence and the Lindback Distinguished Teaching Award. All full-time faculty consult with colleagues from across the University to ensure our course goals are appropriately connected to our students' learning experiences in other classes, as well as connected to work done by our students with writing tutors and others in the Learning Center. These practices have now become more structured due to the inauguration of assessment and Nexus Learning advocates for each College.

Architectural education, revolving around the studio experience, traditionally has been a dynamic, collaborative, hands-on, and (often) interdisciplinary activity. As University priorities have moved heavily in that direction, the design-based faculty and students have seen peers in other University programs move closer in their teaching and learning methods. The Colleges fosters this type of education (Nexus Learning), and Architecture faculty and students have mentored peers across the University and have been recruited as counterparts in multidisciplinary collaborations. Architecture faculty have served on the Signature Learning Action Team, which involved overseeing the ePortfolio Implementation as well as chairing the DEC (Design, Engineering and Commerce) Research Innovation Grant Committee (later called the Nexus Grants) as well as participating in the DEC Foundation and First Year Curriculum Working Group and the SERVE-101 Learning Community. Current Associate Provost and architecture faculty, Prof. Susan Frostén, supervised a two-semester-long project on a fueling station of the future (Sustainable Station +), which involved faculty and

students from graphic design, business, and economics of sustainability. Beginning Spring 2012 architecture professors David Kratzer and Donald Dunham collaborated with Library Director Karen Albert and an assembled design and planning team comprised of University faculty from two other Colleges, staff, and exhibition professionals on a proposed exhibit to highlight Pennsylvania Senator Arlen Specter's key role on the Warren Commission. During Spring and Fall 2013, student teams from architecture and graphic design designed and fabricated the exhibition entitled *Single Bullet: Arlen Spector and the Warren Commission Investigation of the JFK Assassination*. The exhibition, installed in the University library, won the 2014 Philadelphia University Nexus Learning Award. Single Bullet has been subsequently acquired by the Battleship New Jersey American History Museum as a permanent exhibition. Using grant funding, Prof. Kratzer and his students collaborated with industrial designers and occupational therapists to design an adaptable hygiene station for universal use. These and other instances help faculty become better instructors and help students learn about their field of study outside the conventional classroom format. As suggested above, Architecture Program faculty often assume leadership roles on College and University-wide committees, and are routinely elected by their peers across the institution to at-large positions on standing committees. Two of the last three chairs of the University Tenure Committee have been Architecture faculty. Faculty continue to deliver papers at academic conferences (at ACSA Annual Meetings and other venues), enter design competitions, and pursue professional practice, thereby remaining engaged in their respective realms of scholarship and practice. In short, architecture faculty (as well as students) contribute significantly to the academic progress of Philadelphia University. Administrators across campus seek their involvement in diverse ways from pedagogical initiatives to scholarship and practice to faculty governance.

An indication that our students are receiving a quality holistic education: 96% of architecture graduates as of 2014 are employed. Alumnus Skylar Tibbets (B.Arch. 2008, M.S. Design and Computation, MIT), is currently a Research Scientist in MIT's Department of Architecture and was awarded a TED 2011 Fellowship. The Architecture Program students are no less prominent on campus. Our students have been elected to top positions in student government, show up in force for many extra-curricular events, have a reputation for being thoroughly engaged in classes across the University, and are respected for their visible dedication to the profession they are preparing to enter. In spring 2011, a group of fifth-year students from the Haiti Ideas Challenge Design X studio were invited to attend the University President's annual Innovation Gala in Center City and show the video they recorded of them building their prototype post-earthquake shelter on campus. In 2012, a collaborative team consisting of one interior design and one or two architecture students from the architecture and interior design Design 6 interdisciplinary studio (M.Arch. Design 4) took first-place overall in the ACSA/AISC Student Design Competition.

DESIGN

It is our expectation that graduates of the Master of Architecture program are ready to function in a global world and they wholly respect diversity, distinctiveness, self-worth, and dignity; to become academic and professional leaders; to make responsible choices; and to continue to learn. Learning to thrive in a multicultural environment is a lesson reinforced by curricular, co-curricular, and extra-curricular experiences. Working at a small teaching university, staff and faculty take seriously the opportunity to expose all students to challenges abundant in and around the city. Philadelphia is a crucible of early 21$^{st}$-century life in America, and a good springboard for students exploring the global context. With a plethora a of experienced adjuncts teaching in the M.Arch. program, this provides a range of approaches for teaching design in the studios: some professors encourage one design process while others follow a different design process, ultimately exposing students to a range of ways to approach design. Whether through experiential explorations, evidence-based design, or computational design methods, students in the program will have the opportunity to apply different approaches to a multitude of design problems—urban, rural, high-performance building research, etc.—all considered through a sustainable filter. In addition, some studios rely on a greater use of technology, others offer a balance between digital and hand, while others employ hand-making/building as a pedagogical design tactic.

In the M.Arch. design, history, technology, and other courses, students will be exposed simultaneously to the wealth of architectural accomplishment and to dire architectural shortcomings around the globe. In 2007 the College established its first graduate program in Sustainable Design, and subsequently made sustainable architecture an important front-and-center topic. This has led to the "CABE CORE" sequence of course offerings by the MS Sustainable Design Program that is a required CABE graduate programs' keystone. For the M.Arch. students will take the 4-credit Sustainable Design Studio along with a 2-credit Landscape Ecology

Seminar. In addition, MARCH-645 Technology 5, the technology capstone course and MARCH-615 Design 5, the comprehensive design studio, reinforce a sustainable approach to building. Our long-term goals are to make sustainable principles second nature to the students, helping them to be better architects and better citizens, and to intersect more consistently with the graduate students, faculty, and courses in the Sustainable Design Program. As we are located in Philadelphia, with its diversity of urban and suburban settings, the M.Arch. program offers multiple studio projects that present students with ethical issues, especially in the MARCH-614 Design 4 studio that concentrates on urban issues and architectural programming. Past examples from the B.Arch. cross-listed courses had students participating in an exercise to design a new facility for Habitat for Humanity's Re-Store, a prototypical shelter for survivors of the Haiti earthquake, and working with the Archdiocese of Philadelphia's homeless services coordinator to address the city's acute housing shortage in low-income neighborhoods.

Our Studio Culture Policy developed in 2012, reiterates the word "respect" (a student's suggestion) to reinforce a healthy attitude in all learning experiences (see "Learning" in **PART ONE/I: SECTION I: Identity and Self-Assessment: Learning Culture**). The challenge and intellectual stimulation of "constructing knowledge" and the rewards of student learning delineate the signature of an architectural education. Often the pedagogical strategy in architecture is described as "architectural training." Architects are educated not trained; in addition to a broad humanities education, the architectural student is immersed into a study of the built environment through case studies, building visits (and ideally study "away"), and studio work. At the nexus of these often complex and esoteric pursuits, is studio culture. This foundation signature is unique to every student and school; like a bar-code, studio culture is the personal signature of the architect's design education.

Other opportunities exist beyond the studio for students to engage design: design/build, service learning in collaborative architecture and landscape architecture studios, study abroad in post-apartheid South Africa – are options graduate and undergraduate students have recently chosen which expose them to the breadth of professional opportunities. The University's Strategic Plan spotlights lifelong learning; by presenting architecture as an enjoyable path of discovery, we hope to reinforce that attitude. Our undergraduate alumni are increasingly choosing to enter graduate programs in architecture, planning, social work, and other fields. While this points to an obvious indication of lifelong learning, faculty are equally proud of the more informal educational experiences our alumni partake in whether they remain in the architectural profession or choose other careers.

Consequently, it is our belief that through varying yet rigorous pedagogical narratives, students will develop design skills and motives that provide agency to architectural innovation. It will be critical for future architects to be complicit in solving complex socio-spatial problems—problems that we have yet to realize.

PROFESSIONAL OPPORTUNITY

Our Master of Architecture Program attempts to provide opportunities for students to experience architecture as a real-world activity. Most design projects in the architecture curriculum (B.Arch./M.Arch.) are assigned on sites readily accessible to students with site visits mandatory and integral to the design process. When feasible, "clients" are involved in the process so students do not work in a complete theoretical vacuum. Sharing studio facilities and support courses with students in the Interior Design, Landscape Architecture, Construction Management, Historic Preservation, and other degree programs, our students are exposed on a regular basis to the collaborative roles and responsibilities of related disciplines. As in the B.Arch. program, many M.Arch. courses will be taught by adjunct faculty holding full-time positions in firms; they bring current experience to the classroom/studio, serve as role models to students in ways full-time faculty cannot, and often facilitate students in their search for internships or other employment. Professional management courses are also taught by adjunct faculty with full-time positions at respected local firms (Kieran Timberlake and Vitetta Architects/Engineers) provide in-depth information about the complexities of architectural practice.

Architecture students routinely interact with professionals besides their instructors, whether through the fall and spring lecture series – which strive to present a spectrum of viewpoints about contemporary practice – or through the many jurors who participate in mid-term and final critiques semester after semester. These are among the advantages of studying architecture in a large city, and also a city within easy reach of New York and Washington, DC. Students have also come to know local architects through events such as internships, the Vitetta "Best and Brightest" student design competition, and through the annual multi-university exhibition

of student work at the local AIA headquarters. Our AIAS chapter regularly arranges for student groups to visit architects' offices.

Annual presentations by NCARB representatives have been well attended and provide students with a good overview of the professional concerns of students and young alumni, and faculty encourage students to enroll in the Intern Development Program (IDP) at an appropriate time. Professor Carol Herman, AIA, is a full-time faculty member and registered architect who serves as our Architecture Licensing Advisor. Prof. Hermann has attended summer IDP workshops in Chicago and Portland and organizes the NCARB presentations in addition to advising students on the licensure process. Students begin learning about architectural issues of health and safety (codes, standards, regulations, and accessibility) in second and third year technology and studio courses; thereafter, their subsequent work must demonstrate adherence to the legal and ethical requirements regarding public health, safety, and welfare.

A cohort of young alumni now practicing in the region regularly attends critiques where they meet and begin forming mentorships with students. One indication of the program's success in this regard is the reception by alumna Karen Blanchard, AIA (B.Arch. 1998, now an architect with Wallace, Roberts & Todd) of the 2010 AIA Philadelphia Young Architect Award.

Architecture students have been involved in AIAS activities at the regional and national level, including hosting Our student chapter has found multiple ways to introduce themselves and their classmates to the profession though firm visits, conferences, architectural tours, and other activities.
Also see **SECTION 2: 2.1 Human Resources and HR Development: Resources to Support Student Learning.**

STEWARDSHIP OF THE ENVIRONMENT

At Philadelphia University, M.Arch. students will be regularly exposed to issues of sustainability. In all of their coursework there will be a strong focus on the environmental effects of the construction industry. In 1995, Professor Rob Fleming began teaching full time at Philadelphia University and was charged with the design, development and teaching of courses that focused on computer aided design, multimedia design and sustainable design. As "sustainability" began to gain formal traction in architectural pedagogy, Professor Fleming was motivated to develop and found the Master of Science in Sustainable Design Program, an interdisciplinary degree program fostering collaboration, integrated design and creative exploration as the cornerstone of successful sustainable design practice. In a move to strengthen the design programs, sustainable practices are now the underpinning of all early undergraduate design studios as well as the foundation of all of the graduate programs. In addition, every technology course further reinforces a sustainable design approach to building. As stated above, it is the intention of CABE to make sustainable design principles second nature to all students. With the Sustainable Design Studio and co-requisite Landscape Ecology Seminar acting as stepping stones to the M.Arch. advanced studio sequence (MARCH - 614 Design 5, Tectonics; MARCH-615 Design 5, Comprehensive; and MARCH-616, Thesis), students in the program will be well equipped to incorporate environmental stewardship as a fundamental architectural and urban design principle. Some of the core values of the Sustainable Design program:

*Transdisciplinary Learning:* The curriculum reflects the range of skill sets needed to attack the complexity and interconnectedness of sustainability projects. Our diverse faculty also reflects this interdisciplinary environment and have backgrounds ranging from architecture to engineering to design to construction management.

*Equity and Diversity:* The program seeks to build an equitable learning environment, one that acknowledges that there is no "norm," no "cultural fabric" to "fit into" but rather a diverse learning environment that encourages students to find comfort in being different. Students are free to pursue their full potential as individuals ready to transcend traditional ethnic/cultural borders.

*Integrated Design Education:* The Program challenges the status quo of standard design and engineering education, by immediately introducing students to experts, design options and creativity through the integrated design process. Open source learning is encouraged and "ownership" of ideas is downplayed so collective solutions to complex sustainability problems can be the focus.

*Design/Quantify/Build:* The program features hands-on, active learning by challenging students to design, quantify and build their ideas.

*Activism and Leadership:* Today, the world is searching for people who can demonstrate leadership, people who can initiate and maintain projects that will positively impact the world. Sustainability requires action, but not without a context of purpose. Activism can be a powerful tool when applied to grassroots movements. Students in the MSSD Program can use their thesis project as a springboard for future career based initiatives.

*Enterprise and Entrepreneurship:* The program focuses itself on teaching the importance of relevant creativity, applied engineering and economic feasibility. Students are prompted to think as sustainability professionals must, and are required to consider the realities of prevalent economic structures as a basis to for building a new green economy focused on the environment, equity and enterprise.

*A Center of Green Activity:* The program is taught in a dynamic environment that is deeply connected to the green community. Students routinely find opportunities for internship, volunteer activities and job placement.

CABE's Landscape Architecture Program has a mission of sustainable urban design through service-learning. The program is committed to providing leadership in confronting ecological issues of the natural environment and cultural and social issues that affect urban neighborhoods, particularly those in need of revitalization. Landscape Architecture Design 7 Studio has recently collaborated with the ARCH-312 Design 6 (MARCH-Design 4) on the ACSA Steel Design Competition as well as with several ARCH-507 Design 9 studio projects.

The Landscape Architecture Program for most projects partners with community groups, schools, or governmental organizations to address "real" environmental and community issues. Recently, in a collaborative event for Design Philadelphia sponsored by CABE and Stantec Architects, "Sustainabilty is More Than A Buzzword" a roundtable panel discussed sustainable design as a constant evolution of innovative ideas regardless of the discipline. Panelists included: Steve Benz, PE, LEED Fellow, Hon. ASLA of Olin Partnership; Tim McDonald, RA, CPHC of Onion Flats; Kelly Thayer AIA, LEED AP BD+C of Stantec; and Michael Pavelsky , AIA, LEED AP BD+C of the Sheward Partnership. President of Philadelphia University, Stephen Spinelli moderated the event.

COMMUNITY AND SOCIAL RESPONSIBILITY

The complex intersection of design studios, support courses in history/theory, technology, and professional management, elective courses, and extra-curricular activities means that each student will emerge from the Program with different experiences, though all will have been exposed to the important issue of engaged citizenship.

Historically the Philadelphia University architectural community has engaged with the larger community on a regular basis and it is likely the M.Arch. students will continue this tradition. In the past students have provided: design proposals and volunteered hours as laborers, for Habitat for Humanity; schematic designs for homeless shelters planned by the Archdiocese of Philadelphia' s Project H.O.M.E.; the University Day of Service annual event, providing students the chance to scrape and repaint nearby structures at Historic Rittenhouse Town, a National Historic Landmark; cleaning and repairing local parks; and other projects for financially-strapped neighbors.

Two faculty worked with staff from the Academy of Natural Sciences in Philadelphia leading to two separate opportunities (studio and seminar) for students in the *Outside In* exhibit, an under-funded and over-looked children's exhibit at the Academy of Natural Sciences. The students provided innovative renovation designs and, to satisfy a short-term goal, one group of students helped renovate the exhibit. Addressing the client's long-term goal, another group developed design strategies for activities and exhibits that engage principles of sustainability and inquiry-based learning.

A section of fifth-year studio undertook an International Homeless Assistance Center Competition, proposing solutions throughout Philadelphia. They were advised by representatives from the City of Philadelphia Support Services, Project H.O.M.E., and the Archdiocese of Philadelphia's Homeless Services and Office of Community Development (HSOCD). Three students branched off and worked directly with HSOCD and Inner City Missions, a disadvantaged women's housing organization, focusing on actual development schemes for a blighted block. They proposed homeless services, housing for Inner City and two other social welfare organizations. These schemes are now being used by HSOCD and Inner City for fundraising, project marketing, and negotiations with City of Philadelphia to acquire and develop the blighted block.

Outside the curriculum, one year the chapter of Freedom By Design built ramps for the home of a disabled young man. *Architect* magazine (December 2009 issue) included a feature on this intervention. Students involved in such efforts, for example in the Haiti prototype shelter studio, gave freely of their time to build the structure (and to document the process) and a subgroup was active in getting the University's Public Relations team to publicize the humanitarian crisis.

Currently in development, is a CABE urban-centric "think tank" or "urban-lab" that fosters inclusive design centered on communities and their social, economic, aesthetic, and ecological well-being. This lab would unite students, faculty and stakeholders in collective action to empower communities locally and globally from the micro to macro scale. By selecting strategic, high-impact areas of study in order to meaningfully contribute to the social development, knowledge, theory, practice and policy of communities in need, the lab would serve as a knowledge and networking hub for collaborative partnerships to facilitate projects. This lab would be a multidisciplinary lab that includes all graduate and undergraduate disciplines in the College of Architecture and Built Environment.

This effort would formalize initiatives that architecture and her sister programs have taken on over the last ten years. A partial list of projects undertaken in the last five years:

- Doctor's Housing, Malamulo, Malawi (Design 9, Harnish)
- Germantown Framework Ecodistrict for GUCDC (Design 9 interdisciplinary, Douglas, Meninato)
- Costa Rica Guanacasta National Park, bamboo structures (Design 10, Plata)
- Single Bullet Exhibit for the Arlen Spector Archive (Design 7, Kratzer)
- Food Oases: Methods for bringing food access to urban food deserts (Design 5)
- Collaborative Habitat: Design Considerations for Habitat for Humanity Philadelphia
- Emerging Urbanism: Design in the Global Context (Design 9 & 10, Harnish)
- Re-envisioning the Culture Center: Designing the Historic eNtokozweni Community Centre, Johannesburg, South Africa. (Summer Traveling Studio, Harnish)
- Urban Retrofit: Re-purposing Historic Philadelphia Public School Buildings
- Project Home: Women's Shelter Design (Design 10, Kratzer)
- Patch Adams Clinic (Design 8, Kratzer)
- Academy of Natural Sciences: *Outside In* (children's exhibit)
- Freedom By Design (co-curricular)
- Haiti Shelters for Post –earthquake disaster relief

Over 55 projects have been design or built since 2004.

## 1.5 Long-Range Planning

**Institution Long-Range Planning**
The Architecture Program's goals align with the University's Strategic Initiative to be "the model for professional university education in the 21st century." The University's priorities include formalizing the Nexus Learning approach (active, real world, engaged, and multidisciplinary), achieving innovation and advancing applied research, and integrating curricular and co-curricular learning. These issues are pursued at multiple levels by various University activities connected to the Architecture Program, including: an interdisciplinary research collaborative focusing on green materials, sustainable design and community outreach, the Center for Innovative Teaching and Nexus Learning, which concentrates on integrating active, collaborative and real-world learning that is infused with the liberal arts across the curriculum, thereby enhancing students' overall academic experience and preparing them for the 21st-century work world. The University's strategic plan and emphasis on Nexus learning also reinforce the Architecture Program's continued search for interdisciplinary opportunities and community partners.

**Master of Architecture and CABE Long Range Planning**
Given that the M.Arch. will have access to resources already in place for the accredited B.Arch. program, the facilities are assigned to the Architecture program and set up to support an architectural education; the faculty is in place and experienced teaching within the larger CABE objectives so will have no problem adapting and responding to the M.Arch. objectives; the College has implemented many new Master degree programs which will provide additional physical and intellectual resources to support the M.Arch. objectives; finally,

Philadelphia University is committed to providing the resources required to develop successful master's degree programs by providing funding, space and faculty positions. Recruiting, admitting, and retaining highly motivated, academically capable degree candidates with a diversity of cultural and life experience backgrounds. Specific goals are continued development of resources in the form of facilities, space, technology, and human resources. In addition, it is the intention to continue aggressively market our programs, in particular the Master of Architecture. Through the efforts of the CABE Advancement Council, a group of benefactors (alums, local and regional practitioners, and industry leaders), the College has been able to successfully strategize and implement major initiatives and improvements to the College programs. These efforts are designed to support CABE's mission and core values as well as the M.Arch. program by assisting in:

- Student recruitment.
- Community-based projects to find strategies that result in creative solutions that will positively impact communities.
- Partnerships with industries, state and local agencies, community entities, and professional organizations for possible joint projects, grant opportunities and sponsorships.
- Helping fund new facilities and technologies (new studios, new studio furniture and computer monitors, Fall 2015/2016)
- Evaluating the program on a regular basis (a key to maintaining its currency and success). More information about assessment can be read in the following section.

In the event the M.Arch. is not successful in either eligibility, candidacy, or accreditation: (1) the Program would offer the immediate opportunity to enrolled students to move into the B.Arch. program with advanced standing. We would also offer students to gain advance standing in a graduate program of their choice such as the MS Architecture, MS Sustainable Design, MS Construction Management, MS GeoDesign, or MS Interior Architecture. Every attempt would be made to make it possible for the students to achieve these degrees in within an acceptable time frame. (2) We are committed to having a successful and fully accredited M. Arch. program and regardless of a setback, we would continue with the accreditation process. We would develop a strategy to evaluate our shortcomings and make the changes necessary for accreditation. We would reach out to NAAB, other successful M.Arch. program administrators and faculty to get as much critical feedback and constructive help. We would also organize a retreat that involved experienced NAAB accreditation team members, other M.Arch. program administrators, and our own faculty and University administrators to examine our process and to develop a positive working path forward. That being said, we will be working closely with NAAB and our own assessment structure to insure accreditation success.

## 1.6 Assessment

**Program Self-Assessment**

INSTITUTION WIDE
Each year, the Program Director is required to submit a Program Assessment Plan to the University that includes Program Goals (connected to Institutional Learning Outcomes), Program Learning Outcomes with the courses involved and methods of measurements, a time frame, the actual learning outcomes, and how feedback improves the course and/or curriculum. Annual updates are due to the Director of the Advising Center. The process of preparing this document illuminates how well the program is progressing toward its mission and stated objectives.

ARCHITECTURE PROGRAM
The continued improvement of the learning environment is the primary focus of the Program Director. A thorough understanding of the issues promoting or inhibiting learning is central to the development of the micro and macro curricular agenda. Furthermore, the Program Director is constantly seeking new opportunities within the Architecture Program, the University at large and the community to strengthen the learning experience.

The Program Director references the stated objectives for each program as assessment is taking place, making sure the pedagogical structure and course content support the overarching goals for the degree program.

The Master of Architecture Program learning objectives are to foster:

1. Professional skills informed by the liberal arts and sciences
2. Multidisciplinary and collaborative approaches
3. A creative synthesis between theory and practice, to inform research and guide decisions
4. An appreciation for global and local contexts, in order to interpret and value diversity
5. Ethically responsible citizens
6. Sustainable professional practice
7. The Learning Outcomes are:

- Address social and cultural issues through informed design solutions.
- Research, analyze, and compare design options in a global environment.
- Function collaboratively to connect beyond the expertise of architects.
- Organize and direct heterogeneous teams.
- Demonstrate the ability to apply design history and theory, sustainable practices, and technology in design projects.
- Demonstrate familiarity of diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns of different cultures and individuals.
- Exhibit the implication of this familiarity on the role and responsibilities of the architect.
- Demonstrate an understanding of the sustainable practice of building.
- Integrate professional practice with issues of public health, safety, and welfare regulations.
- Demonstrate an understanding of dealing with clients and consultants, and integrating community service.
- Exhibit an awareness of structural, environmental, and other building systems that support a healthy environment.
- Demonstrate familiarity with current research and best practices.

In addition, Graduates of the Master of Architecture program will:

- Have demonstrated the CABE core values of collaboration, innovation, and sustainability.
- Have applied and demonstrated an integrated design process that synthesizes ecological and social responsibility, cultural significance and design excellence, and economic viability.
- Have applied and demonstrated innovative technologies into the planning and design process such as: Building Information Modeling (BIM), GIS/advanced spatial modeling, and Integrated Project Delivery (IPD).
- Have demonstrated applied research to expand the knowledge of the discipline.
- Have demonstrated professional presentation and communication skills
- Have participated in service-learning projects resulting in strategies and creative solutions that lead to positive impacts on communities.
- Pursued partnerships with industries, state and local agencies, community entities, and professional organizations in joint projects, small grant opportunities, and sponsorships.
- Demonstrate the integration of knowledge, analysis and research through the final thesis project.

**Curricular Assessment and Development**
Faculty will develop and modify syllabi and judge student work according to the learning outcomes. Similar to the B.Arch. program, this will occur on a frequent schedule individually, and on a more structured schedule as a program. Having NAAB visit our B.Arch. program every six years has encouraged us to develop an assessment plan that has short-term and long-term cycles. Each semester or each year, faculty coordinating a course visit multiple sections (for example, during a project critique or a typical lecture), evaluate the effectiveness of the course against stated student performance criteria, collect suitable examples of student work (exams, assignments, design projects, etc), and meet with all faculty assigned to teach the course in order to collect their observations as well as to disseminate improvements for the coming semester. Since the full-time faculty meet twice per month (one College faculty meeting and one Architecture Program meeting), there are multiple opportunities to discuss curricular issues as a group each academic year. The College Assessment Advocate also assists faculty in developing comprehensive rubrics for their courses;

consequently, more consistent metrics have been established to provide greater accuracy in course and program assessment.

Every three years full-time faculty meet formally to discuss the B.Arch. curriculum as a whole and how each course fits into the overall matrix, consequently the program is able to stay ahead of any significant problems that could develop as well as responding to changing ideas and technologies (see **PART ONE/II: SECTION 2: Curricular Framework 2.3 Curriculum Review and Development** for a detailed description of this process).

Initially, the Master of Architecture Program will have a one-year assessment cycle with a three-year assessment cycle following the first program accreditation. Should the Program Director determine that particular courses or the overall pedagogical approach must adapt to achieve the stated objectives of the program, all necessary changes will be made in a timely manner according to the existing conditions within the architecture programs.

**Student Assessment**
The primary group for assessing program performance is the full-time faculty, which is done through the continued assessment of student learning.

The University also instituted a new assessment reporting mechanism named Starfish in 2014. The program allows faculty to "flag" students who either exceeding expectations or falling behind for various reasons. Fields for selecting larger concerns are pre-defined, and there is an opportunity for individualized feedback as well. This system has successfully connected student assessment with advising such that students are made aware of their standing with a course and advisors are knowledgeable of how they can help the students succeed.

**Student Input**
The University conducts a variety of student surveys and participates in both the National Survey of Student Engagement (NSSE) and the Noel-Levitz Satisfaction-Priorities Survey (see http://www.philau.edu/ir/). An assessment plan for evaluating student learning in all academic programs and administrative units has been instituted, using a Dashboard Analytics data reporting system which provides a scorecard for comprehensive assessment of effectiveness, identifies areas of targeted intervention, and allows units to align more easily with institutional goals and processes. The data is carefully considered and integrated into the planning process at all levels of the institution.

There are at least three other avenues for student input: All full-time faculty serve as academic advisors to Architecture students, which provides an opportunity for students to share their concerns or ideas regarding the courses they have taken or are taking. All courses have faculty coordinators and students are informed that they should bring any concerns to the coordinator if they do not feel that speaking to their own instructor would be appropriate or effective. Finally, at the beginning of the semester, the Program Director arranges meetings with students to disseminate general information and upcoming events, as well as to encourage the students to make recommendations about their education at that moment or at a later time. Students take advantage of this opportunity to make recommendations for improving the curriculum, the facilities, and/or policies that impact them on a regular basis.

**External Assessment**
The formal institutes in place for accrediting the degree programs at Philadelphia University are the National Architecture Accreditation Board and Middle States Association of Colleges and Schools (MSACS), which has its own assessment priorities and reporting structure. All suggestions and recommendations made by both accrediting intuitions provide insight into the successes and weaknesses of the program, and any changes will be overseen and implemented by the Program Director in a timely manner.

In addition to NAAB and Middle States, professionals in the greater north east region visit the campus regularly to sit on student review juries. Their direct comments to the students during the studio review and to the faculty after the review provides insight into how well the course achieved its micro stated objectives, how well it compares to other degree programs the reviewers are familiar with, and how well the course prepared students for a professional career in the field of Architecture.

Students also enter the annual John Stewardson Memorial Competition, a Pennsylvania wide competition in which students learn the program 10 days before beginning a week long solo charrette. All accredited programs in the greater Philadelphia area enter the competition, which makes the granting of awards a marker for how well students measure against other academic programs.

In addition to competitions, students participate in both internal and external exhibitions. To read more about these opportunities, please see **Resources to Support Student Learning** in the following section.

# PART ONE/I: SECTION 2: Resources

## **2.1** Human Resources and HR Development

**Policies and Procedures Relative to EEO/AA**

Philadelphia University, an Equal Opportunity Employer (*FM*, 10.3), is committed to providing equal opportunity with respect to employment and employment-related issues, for all employees. The full policy is articulated in the *Employee Handbook*, 2.1.1.A. The University is a covered employer under the Family and Medical Leave Act of 1993 as Amended ("FMLA"); see section 2.2.7. The University strives to create a work environment where all individuals are treated fairly, with respect, and where personnel decisions are made on the bases of job qualifications and merit. It is the policy of the University to employ, train, compensate, promote, and provide other conditions of employment without discrimination due to race, color, religion, national origin, sex, age, handicap, veteran status, sexual orientation, or other classification protected by federal, state or local law. See *EH,* 2.5.1.

**Initiatives for Diversity**

As stated in the *Employee Handbook*, 2.1.1.B: "Where protected groups are under-represented among its employees, the University pledges aggressively to pursue means of remedying imbalances. The University will implement and administer this policy in accordance with all applicable federal, state and local laws and regulations." One method of doing this is the assistance Human Resources staff have given to chairs of search committees, in particular referring them to the approximately 30 website links on its Advertising Options for Diversity portion of the *Recruitment Resources for Hiring Managers* webpage.

As part of academic planning, the Provost is working with a consultant, the educational consulting firm Educational Advisory Board, to analyze the current body of the faculty, its distribution, and faculty-student ratios, recognizing the pressing need to increase and diversify the number of full-time faculty in terms of age, race, gender, ethnicity, scholarship, and expertise. Recently hired full-time architecture program faculty are testament to the goal of increased diversity: two of three new faculty are minority members. Also, when recruiting part-time faculty, the program similarly seeks to increase diversity in terms of race, ethnicity, and gender.

**Human Resource Development Policy**

Increasingly, the University has been formalizing and improving its mentoring procedures for new faculty and expanding options for faculty development. New employees, including administrators and faculty, attend a series of orientation sessions that cover topics from employee benefits to managing new technologies in the classroom. Furthermore, the *Faculty Manual 2015, Employee Handbook,* and other resources are posted on the University's website for easy consultation. In the Architecture Program, new faculty are assigned a more experienced faculty mentor and typically meet with the Program Director at least once per semester to discuss progress in teaching, professional development, and service. All faculty submit a Faculty Activity Report which serves as the basis for a yearly evaluation by the Executive Dean. Due to the University's small size, more frequent meetings with the Executive Dean and/or the Program Director are common for all faculty.

The majority of architecture full-time faculty are registered architects and are thus subject to the same continuing education requirements as any professional architect. In addition, despite full-time teaching and service loads, many continue to practice architecture in some way: finding smaller projects, those that appeal to a particular niche, and/or design competitions. Faculty have access to the *Chronicle of Higher Education*, professional journals and the *Journal of Architectural Education*, attend lectures on campus and at other institutions, and network at conferences. These activities update their exposure to the field and usually impact what they bring to the classroom and studio. Adjunct faculty also tend to be licensed architects and/or engineers practicing in greater Philadelphia. They largely work full-time in design offices and bring that current experience into the classroom/studio with them. Professional currency is particularly important to our programs.

**Resources Available to Faculty**

The University and Architecture Program value faculty members' professional activity and achievement, and expect faculty to bring their professional development into the classroom, as expressed in the *Faculty Manual*,

21.2.3: “It is expected that through their own curiosity and interest, faculty will continue to question, to investigate, and to use their findings in the classroom.” The University offers the highest salary and best benefits package it can, given the constraints of its budget, to reward faculty achievement, foster quality education, and remain competitive with similar institutions. Tenured and practice faculty with a least seven years of full-time service, are eligible to apply for an initial sabbatical leave. Eligible faculty can apply for one of the available sabbatical leaves. Applications are reviewed by the CPC and UPC both committees make recommendations to the Provost and President. The President makes a *de novo* decision following her/his review of the recommendations and applicants. Faculty who have been granted a sabbatical leave may request a one-semester sabbatical leave at full salary or a two-semester leave at half salary. Faculty who have been granted a Fulbright Award are eligible to receive a leave of absence from the University contingent on the leave being consistent with the objectives and needs of the College and the University. The University has funded travel to academic conferences for faculty presenting a paper; typically funds are sufficient for each faculty to take advantage of this once per academic year. New faculty have received similar funding even when they are not presenting, so as to acclimate them to the academic milieu they are entering. The University also sponsors Grants for Faculty Research, Scholarship and Design Projects, a competitive initial funding source for faculty work at its early stages. Other resources include the Center for Teaching Innovation and Nexus Learning, digital technology workshops designed and conducted for staff and faculty by the Office of Information Resources’ Instructional Technology Support, as well as the Virtual Center for Instructional Technology. The University’s Patent Policy is found in the *EH*, 2.5.9. With its Patent Policy, the University attempts to ensure that any inventions resulting from the research and scholarship pursued at the University are developed, disseminated, marketed and commercialized for the mutual benefit of the inventor, the University and the public.” The Intellectual Property committee overseeing this issue is comprised of administrators and faculty representing all academic units.

**Full-time Faculty Appointments, Promotion, and Contracts**
To aid in the selection of candidates for faculty positions, officers of the University appoint advisory search committees, whose recommendations are not binding, but extremely helpful. When appointed by the President, subject to approval of the Board of Trustees, a new faculty’s contract is one of the following three categories of full-time faculty (see *Faculty Manual*, 5):

- Tenured or tenure-track faculty members holding one of the following academic ranks: Instructor, Lecturer, Assistant Professor, Associate Professor, and Professor. Tenured and tenure-track faculty focus on teaching, professional activity and achievement in their current field, and service to the University.
- Renewable non-tenure track “Practice-track or Practice faculty” are faculty holding one of the following academic ranks: Instructor, Lecturer, Assistant Professor, Associate Professor, and Professor. They focus on teaching, professional activity and achievement in their current field, and service to the University.
- The University has two types of visiting teaching faculty: research-oriented faculty and Practice faculty. Visiting faculty are appointed to fill special, short-term teaching needs, not to exceed a maximum of five consecutive one- year full-time terms.

The new tenure-track or practice-track faculty member typically has a probationary period of three two-year contracts, for a total of six years (FM 11.10). During this time, the Program Director observes her/his teaching and provides mentorship in all areas of faculty responsibilities. A formal review occurs of the faculty’s application for a contract renewal during the year before a new contract is scheduled to begin (in other words, during the second and fourth years); the College Personnel Committee considers the Program Director’s recommendation letter, peer evaluations and vote by the College senior faculty, student evaluations, and a portfolio of course materials and professional and service accomplishments before passing along a recommendation to the Executive Dean. Subsequently the chair of the College committee and the Executive Dean present the candidate’s application materials to the Provost who subsequently makes a positive or negative recommendation to the President. The President notifies each candidate of the final decision. During the 6th-year dossier review, an additional step of soliciting appropriate assessors from outside the University is added. The University Personnel Committee may award tenure to tenure-track faculty and a five-year contract to practice-track faculty. During the last year of a five-year contract, practice-faculty are eligible to apply for a seven-year contract (and all subsequent contracts would be also for seven years).

Criteria for new contracts, including tenure, and promotions are established by the *Faculty Manual*. The most significant factors measuring the excellence of a faculty member are judged to be:

- Academic attainment as measured by degrees earned, with faculty having earned the appropriate terminal degree in the professional field and those appointed to tenure typically having earned the highest degree in their field of competence.
- Experience relevant to the member's responsibilities.
- Consistently high performance in teaching.
- Professional achievement and continuing growth in the faculty member's field of specialization, including research and publication; presentation of papers at professional or industrial meetings; leadership in professional organizations; consulting; other concrete contributions to one's profession; for design faculty, published research and juried exhibits demonstrating original contributions to the field.
- Contributions to the University, showing a continuing commitment to maintain and improve the intellectual and creative life of the institution. These include effective participation and leadership on committees of the College and the University, program development, involvement in campus activities, and representation of the University beyond the campus.

Although the majority of criteria is similar, the *Faculty Manual* differentiates between suitable achievements for tenure-track/tenured and practice-track/practice faculty in the following ways. For professional development, the former can contribute (among other ways) via published scholarly reviews of significant areas of advancement and/or original research demonstrated by publication, while the latter can contribute (among other ways) via published professional reviews of significant areas of advancement and/or regular and sustained practice in the field and/or maintenance of licensure. (see *FM*, 21.2.3.B.)

In addition, CABE tenure-track and practice-track/practice faculty are aided by guidelines assembled by the College Personnel Committee, which was produced by CABE faculty to be used by the committees, Provost, and President as they review candidates. The guidelines parse out specific issues and examples of professional achievements in teaching, service (to the University and to one's profession), and professional development (scholarship and/or practice).

Recommendations for advancement in rank for both tenure-track/tenured and practice-track full-time faculty originate with the College Personnel Committee (CPC) and advance to the University Personnel Committee (UPC) and Provost; each deliberates separately. The UPC recommendations are submitted to the Provost, who in turn, submits both the CPC and UPC recommendations along with her/his own to the President. Final decisions on all tenure, promotions, 5-year and 7-year practice-track/practice contracts reside with the President. (see *FM*, 21.)

**Part-time and Short-term Faculty** (see *FM*, 9.2, 9.3):
Part-time faculty members may be on 9,10 or 12 month contracts depending upon the curricular needs of the program. Part-time faculty are offered annual contracts, which may be renewed by the University upon the recommendation of the Executive Dean to the Provost and President. Short-term faculty are typically appointed for a single semester at a time. Contracts are dependent upon sufficient enrollments in the courses listed on the contract.

**Faculty Teaching Loads**
Ordinarily, each full-time faculty member will teach (12) workload units per semester. A workload units is calculated by multiplying a course's contact hours by its Instructional Method Value (IMV). Contact hours are published in theUniversity Catalog. The Faculty Compensation Policy, as amended from time to time and posted on the Provost's Office web page, contains the definition of IMV.
See: http://www.philau.edu/provost/resources/Compensation%20Policy9.3.pdf
The 2015-2015 University Catalog:
http://www.philau.edu/catalog/inc/documents/CATALOG_PDF/Catalog2015.pdf

**Faculty Resumes**
Faculty resumes are found in **PART THREE Supplemental Information/B. Faculty Resumes** (pg. 40)

**Visiting Lecturers and Critics**
The College of Architecture and the Built Environment maintains an annual spring lecture. Since its inception, the lecturers have been prominent design professionals; however, recent lecture series have expanded to include those working in less conventional settings, such as NGO's. The Architecture Program has also organized an annual fall lecture series, primarily based on technology.

Past lecturers include:

Jaime Lerner, former president of International Union of Architects
Thom Mayne, FAIA
Lars Spuybroek, NOX, Rotterdam, and Prof. Digital Design, University of Kassel.
Laurie D. Olin, FASLA, Olin Partnership.
Zaha Hadid
Antoine Predock, FAIA.
Brad Cloepfil, Allied Works Architecture.
Moshe Safdie
William Sharples, Principal, SHoP Architects
Billie Tsien, Tod Williams Billie Tsien Architects
Marlon Blackwell, FAIA, Prof., University of Arkansas
Dan Wheeler, Wheeler Kearns Architects
Kevin Daly, Principal, Daly Genik Architecture
Peter Eisenman and Michael Graves, Architects, panel discussion
Sebastian Mariscal, Principal, Sebastian Mariscal Studio
Odile Decq, Studio Odile Decq

**Visiting Critics**
Each semester studio faculty invite guest jurors for mid-term and final reviews. Generally, jurors comprise architects and designers from the Philadelphia region including New York, Baltimore, and Washington D.C.

**Resources to Support Student Learning**

*Exhibitions*
The College of Architecture and the Built Environment has developed an exhibition program through the "SEE" initiative (Student Exhibition Environments). SEE offers Philadelphia University students, staff, and faculty an opportunity to "see" projects that are being produced by students in the College of Architecture and the Built Environment. SEE is not only a teaching tool for our design students, it is also a venue to showcase work to prospective students, their families, as well as to visiting professionals to our College. The main SEE Gallery space centrally located in the Architecture and Design Center (A+D) has proven to be successful in this regard with a range of exhibitions showcasing the work of CABE students. The adjoining A+D Office Gallery features photographs, drawings, and models by CABE faculty as well as by other architects, designers, and photographers. Exhibitions generally run 3-6 months.

Recent past and current exhibitions:

- *Simulations:* A New Building for the College of Architecture and the Built Environment
  Selected Design 9 for Architecture Studio Projects
- *Intercurrences:* Intervening Design Strategies
  Selected Interior Design Studio Projects
- *Cross Sections 2013*: Selected Work from the College of Architecture and the Built Environment
- *The John Stewardson Memorial Scholarship in Architecture Competition:* CABE Selected Projects
- *The John Stewardson Memorial Scholarship in Architecture Competition:* Pennsylvania State Finalists
- Tough Competition: Selected Competition Work from the College of Architecture and the Built Environment
- Morna Livingston: Steps to Water
- *LIMIT_Less:* Selected 2D/3D work from CABE Senior and 5th year students in architecture, interior design, and landscape architecture.
- *Frank Flury:* Thinking and Doing

Future Exhibitions:

- *Detection:* Selected Work from Freshmen Design in the College of Architecture and the Built Environment
- *God is In the Detail:* The Architectural Detail in Detail [architecture, landscape architecture, and interior design]
- *4-D Prototyping:* Animated Architecture
- *Seeds:* New Sustainable Strategies from Landscape Architecture and Sustainable Design

Annually, the College participates in a joint exhibition *Degrees of Design: Student Work from Local Architecture + Design Schools* exhibition, the Philadelphia Center for Architecture's annual survey exhibition of work taking place in Philadelphia's architecture and design schools.

Since the University is located within easy access of the Philadelphia region's museums and galleries and other universities, students have many opportunities to see public exhibitions throughout the academic year, in particular when it is part of a course or when work by faculty and/or students is displayed as part of a First Friday event in Old City (the neighborhood where the majority of galleries is located).

*Annual CABE Publication: SPACEWORK*
Last year, CABE students conceptualized a new type of design annual. With oversight from Prof. Donald Dunham, an editorial team of 12 students from designed, wrote, and produced a 100+ page journal highlighting work from all of the college's graduate and undergraduate programs. The content represented students in all years of study and included interviews with faculty and graduate professionals. *Spacework* highlighted the College's programs in architecture, interior design, construction management, geodesign, landscape architecture, and sustainable design, as well as the university's nexus learning approach. *Spacework* is not an annual review highlighting the best work of the year; instead, it is a critical examination of the comprehensive CABE studio experience and the design concepts and critical thinking from various perspectives. The students who envisioned *Spacework* and the faculty who support it, see the publication as a foundation for studio culture, as a touchstone for students as they journey through the entire course sequence, and as a dialogue about design and process.

*Click here to learn more about the inaugural issue of SPACEWORK:*
*http://wordpress.philau.edu/today/2014/05/21/college-of-architecture-and-the-built-environment-students-publish-new-design-journal/*

*Academic Learning and Advising*
The Learning & Advising Center is the primary learning assistance resource at the University. Professional and Peer Tutors assist students in all majors, graduate and undergraduate to become better at learning course material and developing course skills. L&A offers content-specific tutoring in all majors, including Math, science, engineering, and business courses. They also offer learning assistance with skills such as Writing, Design, time management, presentation skills, and study strategies. Students in the M.Arch. program are advised by the Architecture Program Director and Associate Director. Advising files are maintained in a central location near the administrative assistant's office. Advisors meet with students in groups and (often) individually, depending on students' needs and schedules.

*Personal advising*
Counseling for personal concerns, including misuse or abuse of alcohol or other drugs, is available to Philadelphia University students at no charge. Counseling is provided on a short-term basis by licensed professionals who understand the special needs of college students. Referrals to area agencies and practitioners are made for those who need more specialized or long-term care. Counseling sessions are by appointment, though students are also welcome to go to Drop-In Hour (4-5pm weekdays) for a brief meeting with a counselor and to arrange for a follow-up appointment. All information shared with counselors is held in strict confidence, as long as there is no clear and imminent danger to the student or others.

*Career Guidance/Internship Placement*
The Marianne Able Career Services Center assists students and alumni with their career and professional development needs. Career Services views professional development as a process, involving both personal career-advising as well as group seminars. Career Services connects students to industry representatives, internship and job opportunities through employer networking events such as Corporate Connections and the Internship Fair (each semester) and Design Expo (each year, including portfolio reviews by industry reps);

CareerLink (online database advertising job openings); Career Spotlights, (bringing industry speakers to campus to present career options); Career workshops and seminars (resume development, job search strategies, grad school prep, and others); Career assessment tests to assist with major selection and career direction; and the Career resource library and online research database (including Reference USA and Going Global).

In addition, several sections of architecture studio are taught by adjunct faculty with full-time positions in nearby architectural firms, some students find formal (for academic credit) and informal (paid by employer) internships through this avenue. All informal internships are paid minimum wage or higher; the Architecture Program does not condone informal internships paying less than minimum wage. Career Services publishes an annual survey of recent graduates regarding their post-graduation plans.

*Field trips and other off-campus activities*
Students participate in trips organized through various University-affiliated organizations – some are voluntary trips sponsored by student groups, others are required by professors for a particular course.

*Professional societies, honor societies, and support to attend meetings*
In fall 2010, the Alpha Lambda Delta national honorary society was inaugurated at the University with 140 students, including Architecture majors. The mission of Alpha Lambda Delta is to encourage superior academic achievement, to promote intelligent living and a high standard of learning, and to assist students in recognizing and developing meaningful goals in society.

Our chapter of the American Institute for Architecture Students (AIAS) organizes a variety of events for students annually, including tours to significant works of architecture (Fallingwater, New York City's Highline, the Kimmel Center), tours of local architects' offices, portfolio reviews, design contests, and other activities. Most significantly, the AIAS leadership spearheaded the recent effort to revise CABE's Studio Culture Policy. AIAS members have routinely attended and have played an important role in Northeast Quad Conference, the National Grassroots Leadership Conference, and other gatherings.

Freedom By Design has had a chapter on campus since 2007. The highlight of this period was a project in which students designed and built ramps for the home of a wheelchair-bound young man. Students were mentored by internationally known architect Michael Graves, and Architect magazine published an article about the effort in December 2009. CABE provides support for AIAS/FBD students to attend the AIAS Forum, Quad and Leadership Conferences.

CABE also supports a student chapter of NOMA (National Organization Of Minority Architects or NOMAS), as well as the Global Architecture Brigade.

*Additional Efforts*
The International Scholars Program (ISP) is a collaborative effort to increase the participation of students from moderate- to low-income families in international study. Since the last accreditation visit, programs have been to Brazil (2007) and Turkey and Tunisia (2008). Of 47 eligible PhilaU students, 26 followed this experience by studying abroad for a full semester.

The Student Development Office has submitted a grant to Campus Compact, a national coalition of more than 1,100 college and university presidents committed to fulfilling the civic purposes of higher education. Dedicated solely to campus-based civic engagement, it promotes public and community service that develops students' citizenship skills, helps campuses forge effective community partnerships, and provides resources and training for faculty seeking to integrate civic and community-based learning into the curriculum (see www.campuscompact.org). The grant is to support a program that retrofits houses in the nearby Germantown neighborhood to enhance energy efficiency.

Specific events, such as the annual Unity Week, also build a strong sense of community. Unity Week is a campus-wide effort that affirms the diversity represented within the University community and affirms the value and vitality of pluralism to our experience. Committed students, faculty, and administrators coordinate a series of performances, speakers, dialogues, open classes, food, and musical events. During two weeks each spring, between 1,000 and 1,400 students engage in discussions and culturally relevant events. The Unity Week format connects to other themed monthly programming, including Black History, Hispanic Heritage, Women's History, and GLBT history, all within a broader context of social justice.

*FIELD TRIPS / OFF CAMPUS LEARNING*
Aside from using Philadelphia and its surroundings as a petri dish, students are encouraged to research and explore some of the other cities and landscapes in the Northeast. Philadelphia's proximity to New York, Washington DC, Boston, and Baltimore facilitates easy access to different urban conditions. The College sponsors numerous off-campus studio-related trips to these cities. Reaching beyond the Northeast corridor to build relationships with architecture programs in cities that offer a different geography and culture, such as Miami or Houston, is being developed for the second year within the M.Arch. program. Also, establishing a formal relationship with Aalto University in Finland will provide students with an accountable and translatable international academic experience.

## 2.2 Administrative Structure

The College of Architecture and the Built Environment is headed by the Executive Dean, assisted by an Associate Dean. The Executive Dean is responsible for running all aspects of the College and reports directly to the University Provost. The Associate Dean's responsibilities for the College include coordinating course and critique schedules, maintaining the website, coordinating the lecture series, work-study students, and fabrication lab staff, resolving grade disputes, and assisting with student opportunities, recruitment, and outreach. A Manager of Academic Operations (MAO) assists with some of these tasks to allow the Associate Dean and CABE's Program Directors to focus more time on curriculum development and assessment, student opportunities, and other program-enhancing tasks.

The Architecture Programs are run by its Program Director, currently a tenured Full Professor. These programs include the a 5-year Bachelor of Architecture, a 4-year Bachelor of Science in Architectural Studies, a Master of Science in Architecture, and the Master of Architecture. The Assistant Director of the B.Arch. Program is primarily responsible for course and classroom scheduling, student advising coordination, and some curricular development. The Associate Director of the M.Arch. program is primarily responsible for student recruitment, curricular development, coordinating the accreditation process, as well as graduate student advising and teaching within the program. The Associate Director is also responsible for the day-to-day running of the program and reports directly to the Architecture Program Director and Executive Dean. In addition to a full-time College administrative assistant, a graduate assistant works with the Architecture Program Director and Associate Director 17 ½ hours/week to assist with curricular and accreditation tasks.

The Program Director as a position distinct from the Executive and Associate Deans has the following tasks: assessing the program and implementing changes; representing the program needs to the Dean; recruiting, mentoring, and helping to assess faculty; developing the curriculum and course scheduling; completing accreditation-related activities; and nurturing student opportunities, including scholarships. The Associate Dean and Program Director also teach (50%), perform University service, and pursue professional development. The Associate Director of the Master of Architecture does not deal directly with the undergraduate program administrative issues, however, as an Architecture Program faculty member, is actively involved in undergraduate curriculum development and other issues that might impact the M.Arch. program. The Architecture Program Director is also assisted by an AP Advisory Board, comprised of three design professionals.

Five undergraduate programs and six graduate programs comprise the College of Architecture and the Built Environment:

*Undergraduate programs*

- Architecture [5-year B. Arch, accredited by NAAB]
- Architectural Studies [4-year B.S. Architectural Studies; concentrations in Architectural Design Technology and Historic Preservation]
- Construction Management [4-year B.S. Construction Management]
- Interior Design [4-year B.S. Interior Design, accredited by CIDA]
- Landscape Architecture [4-year B. Landscape Arch., accredited by LAAB]

*Graduate programs*

- Architecture [M. Architecture (professional degree)]

- Architecture [M.S. Architecture (post-professional degree)]
- Construction Management [M.S. Construction Management]
- GeoDesign [M.S. Geodesign]
- Interior Architecture [M.S. Interior Architecture]
- ustainable Design [M.S. Sustainable Design]

CABE, in conjunction with the Kanbar College of Design, Engineering and Commerce (CDEC) and the College of Science, Health, and the Liberal Arts (CSHLA) fall under the direction of the Provost, the Chief Academic Officer of the University. The Provost and the Office of the Provost; the focus on supporting faculty involved in curricular change and development, research initiatives, teaching innovation and Nexus Learning. The administrators who work under the direction of the Provost and their responsibilities are listed in the *Faculty Manual* (under Academic Administration, section 1.3.2). Full-time faculty also serve as Academic Support Advocates (Nexus Learning, Assessment, and Academic Advising) to their own Colleges. The Provost reports directly to the President, the Chief Executive Officer of the University.

**Opportunities for Involvement in Governance**
The University's "Organization of the Faculty" is based on the philosophy of governance presented in the AAUP *Joint Statement on Government of Colleges and Universities.* Shared governance is accomplished through joint faculty and administration service on most faculty standing committees and on the Advisory Board. Simultaneously, the work of the administration and faculty go forward through the Committee of Chairs, the President's Council, and the Provost's Council (*FM*, appendix B). Monthly faculty meetings provide a forum to disseminate relevant information and to debate current academic issues. They are run by the secretary of the faculty, who is elected by the faculty to a two-year term and may serve a maximum of two consecutive terms.

Full-time faculty are invited (indeed expected) to be involved in faculty governance by attending the monthly meetings of the University faculty and by serving on one of the standing committees. More than half the full-time faculty serve on a University standing committee. Often a faculty member is also a member of one or more school and/or program committees and university task forces. Faculty have tried to organize these responsibilities by serving on related committees. For example, one faculty member may have served as the Architecture Program representative to the College Curriculum Committee (CEC) and simultaneously as the College representative to the University's Academic Opportunities and Oversight Committee (AOOC), thus being able to follow curricular issues from the grass roots level to final University approval. Faculty also participate in monthly meetings of the College and monthly (sometimes more frequent) meetings of the Program. All full-time faculty and occasional adjunct faculty in the Architecture Programs (B.S. Architectural Studies, B.Arch., M.S. Architecture, and M.Arch.) meet together at these monthly meetings. Full-time faculty are required to attend Convocation at the onset of the academic year and Commencement at its conclusion, and typically attend at least one Open House event annually during which time they represent the Architecture Programs to prospective students and their families.

Though not required to serve, adjunct faculty are represented on some task forces. For example, the College Studio Culture Task Force included a long-standing adjunct faculty member. The standing University-level Faculty Affairs and Development Committee includes a subcommittee for adjunct faculty, charged to review and recommend revisions of policies and procedures regarding adjunct faculty compensation, working conditions, review, and other issues.

## 2.3 Physical Resources

**Architecture Program's Physical Plant**
The Architecture Program offices (Architecture Program Director and M.Arch. Assoc. Dir.) are located in the A+D Center, which is shared with the Executive Dean, Assoc. Dean, and Interior Design Program Director; eight full-time architecture faculty offices are located in Smith House; one full-time architecture faculty member is also the Associate Dean so his office is at the A+D Center, next to the Dean's office. Adjunct faculty are invited to share office space in the A+D Center.

M.Arch. teaching spaces are located in a variety of buildings across campus. Studio and crit spaces for the M.Arch. summer foundation studios will be in the SEED Studios and Lab, as will the M.Arch. year-one studios.

The M.Arch. Assoc. Dir. office may relocate to SEED in Fall 2015. Studios for M.Arch. year-two, Sustainable Design Studio will also be in the SEED Center while Design 4 will be in the newly renovated lower-level of the A+D Center. Dedicated studio spaces for B.Arch. years three through five are primarily located in the A+D Center. The SEED Center is intended as the home of the College's graduate programs in Interior Architecture, Sustainable Design, and Construction Management, the building has been used for some upper-level architecture studios and it also houses a satellite fabrication lab (see below) and computer lab, both used by graduates and undergraduates. SEED will may also be used for some cross-listed B.Arch./M.Arch. courses. The University's Gutman Library is next to the A+D Center. Technology and history courses will continue to utilize classroom space shared by the University community. The architecture program, graduate and undergraduate, regularly uses seminar spaces and lecture theatres located in A+D, SEED, Gutman Library, Tuttleman Center, as well as in the Kanbar College of Design, Engineering, and Commerce Building located adjacent to the A+D and SEED Centers. The main fabrication facility is located in Weber (for a list of tools, see below). Both A+D and SEED contain rotating exhibitions of student work (see **2.1 Resources to Support Student Learning**, above).

The Weber and SEED Fabrication Facilities Equipment Inventory:

**Weber Fabrication Center:**

| *Stationary power tools* | | *Metal tools* |
|---|---|---|
| Table saw, 10" | Disc sanders, 12', three | Foot shear, 42" |
| Jointer, 6" | Sander, comb. 1" belt x 6" disc | Bending break, 36" |
| Band saws, 14", two | Sander, 3' x 36" belt | Band saw, 6" horizontal |
| Drill presses, 16", two | Sander, spindle | Bender, rod & bar |
| Router, table | Mitre/chop saw, 12" | |
| Modelmaker table saws, 3 ½" | CNC 48" router (May 2015) | |

| *Hand power tools* | | |
|---|---|---|
| Saw, 7 ½" circular | Sander, 4" belt | Heat guns, two |
| Drills, 3/8", two | Sanders, 5" disc, two | Grinder, 4" angle |
| Routers, two | Saw, jig | Biscuit jointer |

**SEED Fabrication Lab:**

| *Power tools* | | |
|---|---|---|
| Saw, 14" band | Sander, 1" belt x 6" disc | CNC laser cutters, two |
| Saw, 7 ½" circular | Saw, jig | Router |
| Drill press, 16" | Saw, 3 ½" modelmakers | Saw, 14" chop/mitre |
| Sander, 4" belt | Sander, 12" disc | Heat gun |

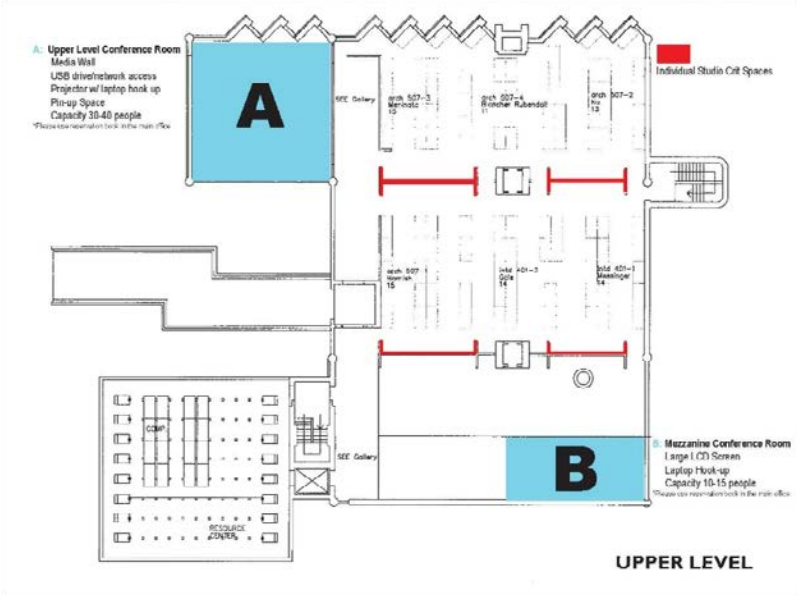
Both Labs have a complete compliment of hand tools, clamps and other necessary aids.

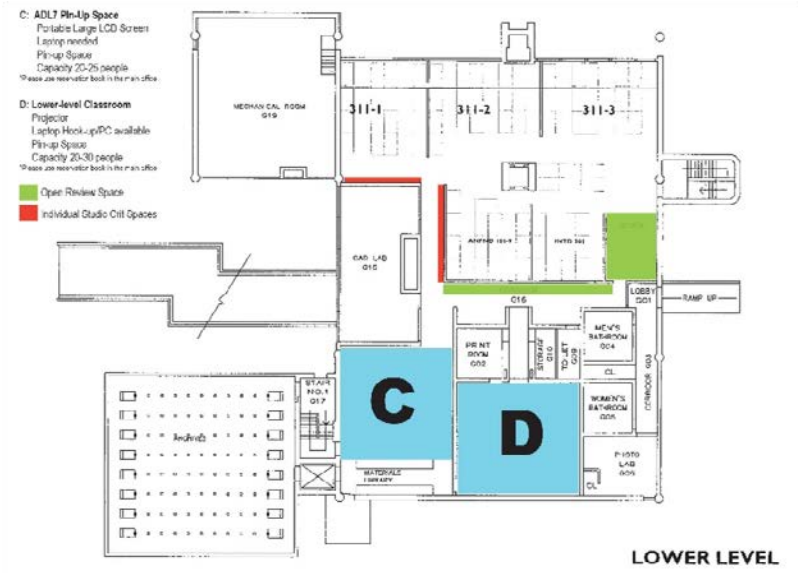
**Plans of the University campus and architecture program facilities (listed below) are found on the following pages:**

- Philadelphia University Campus
- A+D (Architecture + Design) Center
- SEED Design Studios and Fabrication Lab
- Search Design Studio and Photography Lab
- Weber Fabrication Center


## Campus Map

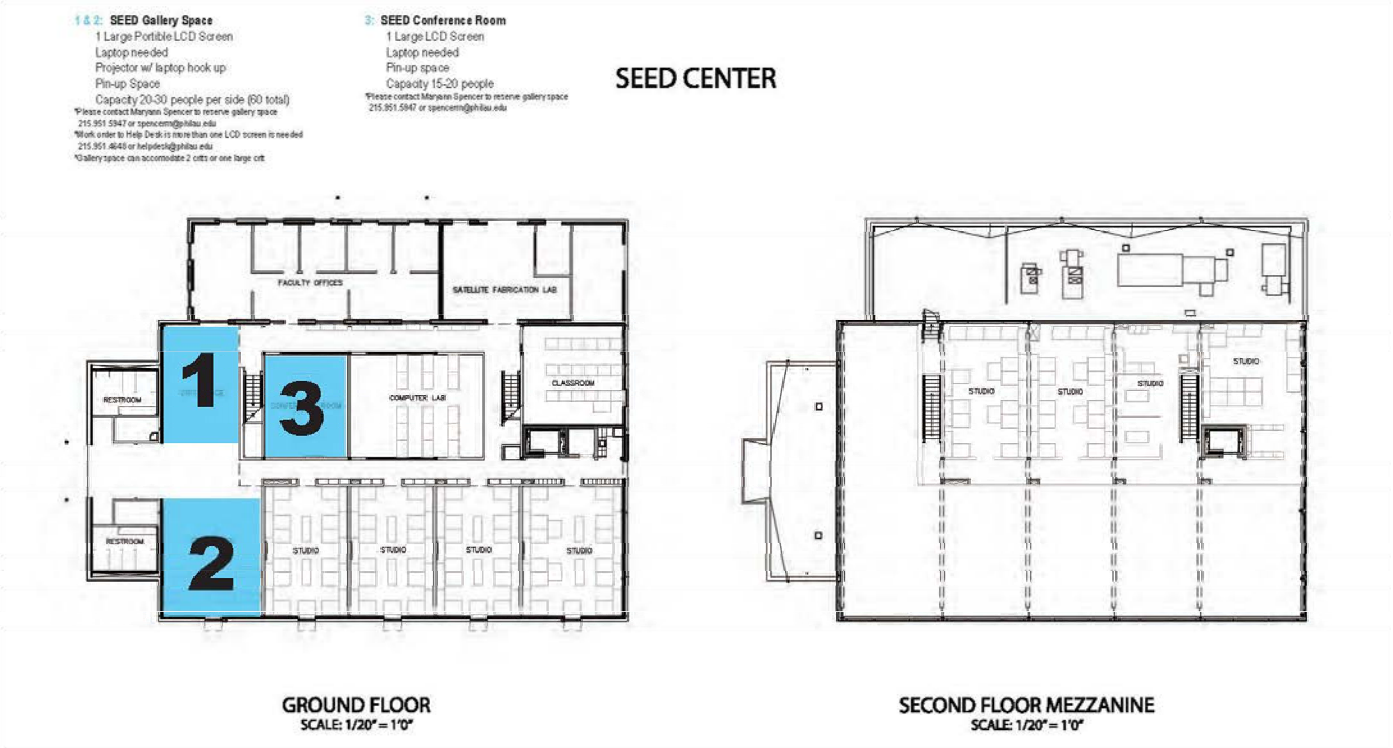
1. Alumni Field
2. Archer Hall
   ~~Business Office~~
   Human Resources
   Registrar
3. Architecture and Design Center
   College of Architecture and the Built Environment
4. Architecture/Interior Design Studios
5. Art Center
6. Carriage House
   Physical Plant
7. Chapel (Ravenhill)
8. The Design Center at Philadelphia University
9. Dining Hall (Ravenhill)
10. Downs Hall
11. Fashion Merchandising
12. The Lawrence N. Field DEC Center
    Kanbar College of Design, Engineering and Commerce
13. Fortess Hall
    Student Residence
14. The Gallagher Athletic, Recreation and Convocation Center
    Parking Garage
15. Gibbs Hall
    School of Business Administration
16. Paul J. Gutman Library
    Downs Board Room
    Electronic Classroom
    Media Services
17. Haggar Hall
    Learning and Advising Center
18. Hayward Hall
    School of Design and Engineering
    Science and Health Labs
19. Independence Plaza
    Student Residences
    ~~A. Franklin, J. Madison, T. Jefferson~~
20. Information Technology
21. The Kanbar Campus Center
    Common Thread
    Mail Services
    Student Life
    University Bookstore
22. Mott Hall
    Student Residence
23. Partridge Hall
    Student Residence
24. President's House
25. Ravenhill Athletic Field
26. Ravenhill Mansion
    College of Science, Health and Liberal Arts
27. Robert J. Reichlin House
    Alumni Relations
    Development
    ~~President's Office~~
    ~~Provost's Office~~
    Public Relations
    Treasurer
28. Ronson Hall
    Student Residence
29. Scholler Hall
    Hortense T. Moss Health Center
    Student Residence
30. Search Hall
    Computer Center
    College of Science, Health and Liberal Arts
31. Security
32. SEED Center
33. Smith House
    Landscape Architecture
34. Softball Field
35. Arlen Specter Center for Public Service
36. Townhouses
    Student Residences
37. The Tuttleman Center
    Continuing and Professional Studies
    School of Business Administration
38. Weber Design Studios
39. White Corners
    Admissions,
    Undergraduate and Graduate
    Financial Aid



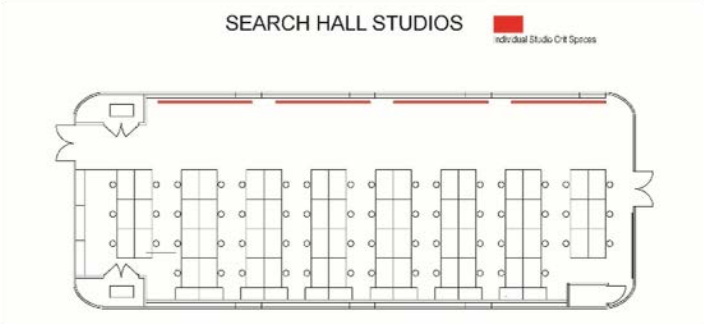

## A&D Center

• **A: Upper Level Conference Room**—Media wall, USB drive/network access, projector w/laptop hook up, pin-up space (capacity 30-40 people).
• **B: Mezzanine Conference Room—**Large LCD screen, laptop hook-up, (capacity 10-15 people).
• **C: ADL7 Pin-Up Space (Lower level)—**Portable large LCD screen, laptop needed, pin-up space (capacity 20-25 people).
• **D: Lower Level Classroom—**projector, laptop hook-up/PC available, pin-up space (capacity 20-30 people).
• **Open Review Space—**two areas available on Lower Level (see green)
• **Individual Studio Crit Spaces—**designated for specific classes (see red)




## SEED Center

• **1 & 2 Gallery Space—**One large portable LCD screen, laptop needed, projector w/laptop hook up, pin-up space (capacity 20-30 people per side; 60 total).
• **SEED Conference—**One large LCD screen, laptop needed, pin-up space (capacity 15-20 people)

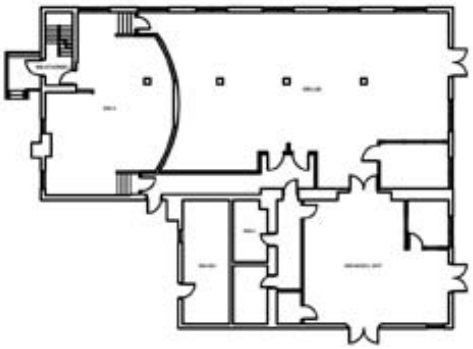



## Search Hall

• **Individual Studio Crit Spaces—**designated for specific classes (see red)

**Smith House**

• **Room 116—**One large LCD screen, laptop needed, pin-up space (capacity 20-30 people)



FIRST FLOOR
A. Technical Labs/ Studios
B. Model Shop
C. Mechanical
SECOND FLOOR
D. Faculty Offices (non-Arch)
E. Review/ Critique Room
F. Storage/ Archives

**Weber Fabrication Center** [for equipment inventory, see page 25]

## 2.4 Financial Resources

**Mastwr of Architecture 5 year financial projections.**
For the program's launch year the program is budgeted at a break even margin. The revenue numbers have been modified to reflect our 15/16 per credit rate and adjusted by a 3% increase in future years. In the future years beyond 2015-16 the projected class sizes remain the same as what was presented in the projection model. The expenses are also from the projection model but we did modify the graduate assistantship to be consistent with our policy of awarding a 9 credit assistantship per semester. This resulted in a slight decrease to expenses.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Philadelphia University** | | | | | | | | |
| **NAAB Application for M.Arch** | | | | | | | | |
| **5 Year Enrollment Projections** | | | | | | | | |
| **FY 2015-16 through FY 2019-20** | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | **Credits per Fiscal Year** | | | | | | |
| **Enrollment Assumptions:** | | Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Cohort 5 | Bridge | Total |
| Number of Students | | 8 | 9 | 10 | 11 | 12 | 6 | |
| Credits per Bridge Session | 6 | | | | | | | |
| Credits per FT Cohort | 30 | | | | | | | |
| | | | | | | | | |
| 2015/16 | | 240 | - | - | - | - | 36 | 276 |
| | | | | | | | | |
| 2016/17 | | 240 | 270 | - | - | - | 36 | 546 |
| | | | | | | | | |
| 2017/18 | | 240 | 270 | 300 | - | - | 36 | 846 |
| | | | | | | | | |
| 2018/19 | | - | 270 | 300 | 330 | | 36 | 936 |
| | | | | | | | | |
| 2019/20 | | - | - | 300 | 330 | 360 | 36 | 1,026 |

| | | | | | |
|---|---|---|---|---|---|
| **Philadelphia University** | | | | | |
| **NAAB Application for M.Arch** | | | | | |
| **5 Year Projections** | | | | | |
| **FY 2015-16 through FY 2019-20** | | | | | |
| | | | | | |
| | | | | | |
| **Fiscal Year** | **2015-16** | **2016-17** | **2017-18** | **2018-19** | **2019-20** |
| **Revenue** | $ 167,380 | $ 590,499 | $942,397 | $1,073,937 | $ 1,212,518 |
| Expense | $ 167,380 | $ 300,257 | $450,214 | $ 459,141 | $ 472,765 |
| Margin | $ - | $ 290,242 | $492,183 | $ 614,796 | $ 739,753 |

## 2.5 Information Resources

**Institutional Context and Administrative Structure of the Library and Visual Resources**
Offering a wide range of library services, the Paul J. Gutman Library houses approximately 150,000 print monographic and bound journal volumes, and provides access to more than 80 online databases to support teaching, study, and research for the University community. The building is centrally located on campus, adjacent to the A+D Center and within close proximity of the SEED Center. Gutman Library staff are committed to offering services with as few barriers to access as possible. The Library Director, Karen Albert, is responsible for overseeing all operations, including supervising personnel, establishing and communicating a strategic plan, developing library services and programs, and handling the budget, as well as library collections. She reports to the Senior Associate Provost, who sits on the Provost's Council. Ms. Albert serves as an advisory member of the Academic Opportunities and Oversight curriculum committee. Five other professional librarians – including a CABE liaison – manage the technical services, website design, reference, interlibrary loan, serials, instruction, and collection development functions of the library, overseeing the paraprofessional and student workers also employed in the library. The librarian liaison to CABE also sits on the College's Education Committee as an advisory member.

**Library Collections**
The architecture monograph and journal collection is integrated within the larger Gutman Library collection, which allows students to browse other design subject areas, including interior design, color, landscape architecture, industrial design, and textile design. This arrangement reinforces the Program's goal of fostering interdisciplinary interests. The library is also developing a prototype materials collection, with the goal of expanding these physical resources, as library space becomes available thanks to online access supplanting print resources in a lot of areas.

*Monographs*
The architecture collection has been developed with guidance from the Dean and teaching faculty of CABE, who recommend titles to be added to the collection. The size and quality of the architecture collection are constantly improving to meet the needs of faculty and students in architecture programs. New courses and programs are supported with appropriate library resources after careful communication with faculty and administration charged with developing curricula. Two professional librarians keep up with new publications and select titles based on curricular needs. The Gutman Library collection is organized to facilitate easy access and full use by all library constituencies. The collection is cataloged using MARC and AACR2 national standards. Applying OCLC shared cataloging, records appear in the online catalog and Summon Discovery tool, which are accessible both on campus and remotely via the Web. Gutman Library's holdings in architecture-related materials now include approximately 33,700 monographs. Below is a breakdown of collection holdings by Dewey and LC categories.

| Dewey(LC) | Subject | Total Volumes |
|---|---|---|
| 307(HT) | City Planning | 685 |
| 333.73(HD) | Land Use | 39 |
| 333.77(HT) | Zoning | 15 |
| 343.078(TA) | Building Codes | 12 |
| 363.5(HD) | Housing | 46 |
| 363.6(SB) | Parks | 64 |
| 621.32(TH) | Lighting | 39 |
| 630-635(SB) | Plant Culture | 461 |
| 645(N) | Furnishings | 49 |
| 684(N) | Furniture | 82 |
| 690-699(TH) | Construction | 654 |
| 700-709(N) | Arts General | 3281 |
| 710-719(NA) | Landscape | 1156 |
| 720-729(NA) | Architecture | 12,497 |
| 730-739(N) | Sculpture | 688 |
| 740-749(N) | Decorative Arts | 9885 |
| 750-759(N) | Painting | 2129 |
| 760-769(N) | Graphic Arts | 457 |
| 770-779(N) | Photography | 743 |
| E-Books with Subject of Architecture | | 704 |
| **TOTAL** | | **33,686** |

A list of the Architecture monographs (print materials) is added to the library's monthly New Books web pages that is organized by subject and includes links to each book's catalog entry. CABE faculty are solicited for their purchase recommendations, and notified when their selections are added to the library's collection.

*Reference Materials, Electronic Databases/Internet Resources*
General reference books are located on the main floor of the Library. Gutman Library provides access to thousands of abstracted, indexed, and full-text journals through its collection of electronic library databases and individual journal subscriptions. These include database systems typically found in academic libraries, such as Lexis-Nexis, EBSCO's Academic Search Premier, and ProQuest. Databases are accessible both on and off campus. Gutman Library subscribes to four major architecture-related databases: Avery Index, Design & Applied Arts Index, Art Index, and JSTOR's Arts and Sciences III collection. The Library also has access to MADCAD's Building Codes database, Environment Complete (EBSCO) and the SAGE Premier journals collection, which includes architecture-related content. Library staff members also maintain research guide web pages which include links to external websites evaluated for quality. Of particular interest to students are links about Philadelphia and its architecture. The CABE librarian liaison regularly provides instructional sessions for students in the use of these materials.

*Periodicals and Journals*
The library journals related to architecture and interior design represent a broad and comprehensive collection of trade, professional, popular, and academic publications. Current issues of all print periodicals are visibly displayed. E-journal acquisition and set-up have increased over the last few years to provide convenient, 24/7 access to important resources. Back copies of print journals are bound for preservation purposes. The journal collection is continually expanded in support of architecture-related programs. The following journal subscriptions were acquired as online-only titles: *Journal of Aesthetics and Art Criticism, Journal of Architectural Education, Journal of Architectural Engineering, Journal of Green Building, .and Journal of Interior Design.*

*Visual Media*
The visual media collection at Gutman Library consists of DVDs, videotapes, and access to digital images through a variety of databases. Excluding the digital images, the media collection consists of approximately 2600 items with an emphasis on textiles, architecture, interior design, and business. Faculty, staff, and students can sign out videos or DVDs for research or classroom use. Additional videos are available through *On Architecture*, a database of audiovisuals and complementary material documenting the main authors, works, experiences and problematics related to the field of architecture.

Students, faculty and staff can access digital images through ARTstor, ARTstor's Shared Shelf, and DETAIL Inspiration. ARTstor provides access to over 1.8 million images in the arts and architecture. Shared Shelf provides access to over 23,000 images digitized from our former slide collection and objects in the library's Special Collections, representing architecture, interiors, sculpture, painting, decorative arts, tapestries/textile design, fashion, furniture, art, costume/theater, and graphic design. The collection on Shared Shelf is continually being updated and expanded with new images added by a half-time visual resources staff person and student workers. Metadata and project oversight is provided by a Gutman professional librarian. Additional images are accessible through DETAIL Inspiration, a database of downloadable projects from all DETAIL magazines of the last 10 years.

**Library Services**
Professional library staff man the Library Reference Desk approximately 63 hours per week. All these staff have experience with resources in architecture, art history, and design. A trained graduate assistant provides an additional 15 hours of Reference Desk support. A library Chat service from a link on the library's homepage is functional during the day and most evenings and weekends when the Reference Desk is staffed. Another link allows submission of questions by email, with responses usually provided the following business day. Librarian Sarah Daub, MFA, MLIS, serves as the library liaison to CABE. In this role, she is charged with collection development, reference support, and providing instructional sessions within courses, as well as overall information literacy support for the architecture curriculum.

Interlibrary Loan (ILL) gives the University community access to books and journals beyond Gutman Library. OCLC's WorldCat connects our Library to the holdings of thousands of libraries around the world. The ILLiad system allows students, faculty, and staff to place, track, and receive articles electronically. Patrons can request books without library staff intervention, from over 70 area academic libraries, using the EZborrow system. Member libraries include: University of Pennsylvania, University of Pittsburgh, Drexel University, Rutgers University, and Penn State University. Books usually arrive within three to five business days. For the last calendar year (2014), we processed 222 ILLiad interlibrary loan requests (164 articles; 58 books) from CABE students and faculty. There were additional book requests made from CABE through EZborrow, which does not total requests by college affiliation.

*Library Staff*

The Gutman Library employs 11 full time staff, two graduate assistants and approximately 25 undergraduate student workers each employed from 5 to 15 hours per week. The staff includes six professional librarians, four paraprofessional/technical staff, one full-time administrative support staff member, and one part-time visual services supervisor, and a part-time shelver/library assistant. All of the librarians provide direct reference assistance to students at the information desk. The Collection Development Librarian solicits staff and faculty recommendations and selects print resources. The professional librarians all have master's degrees from ALA-accredited institutions, as well as degrees (some at the Master's level) in other disciplines.

**Library Facilities and Equipment**

The Library is a 54,000 square foot building, with over 80 computer workstations, each equipped with an assortment of software, including applications for design and architecture students, like AutoDesk programs and the Adobe Suite. The Library has seven group study rooms, and many comfortable seating areas designed for quiet study or research. There are also scanners and printers available throughout the library for patron use.

A Library Instruction Space , is available on the main floor for educational sessions that support the Information Literacy (IL) mission of the Library and University. The area includes a SMARTboard, a cart housing 19 laptop computers, an instructor podium, and tables and seating for 20-25 students. The space was created to promote the principles of active learning and collaboration through hands-on class participation, and is available by reservation for library instruction sessions led by faculty or library staff.

**Library Financial Support**

Architecture resources are allocated within the general library budget, which is developed and administered by the Library Director. The first table below approximates yearly amounts spent on the Architecture and Design collection, demonstrating the growth in financial support over time, while the second summarizes library collection expenditures overall for FY13 through 15.

| Fiscal Year | A+D Book - Expenditures | No. of books | A+D Journal - Expenditures |
|---|---|---|---|
| FY13 | $24,649 | 254 | $28,519 |
| FY14 | 22,794 | 270 | 27,975 |
| FY15 | 24,680 (projected) | NA | 29,528 |

| Collection Type | Budget – FY13 | Budget – FY14 | Budget – FY15 |
|---|---|---|---|
| Books | $ 98,940 | $ 87,403 | $ 88,277 |
| Journal Subscriptions | 188,956 | 204,514 | 225,463 |
| Multimedia | 5,400 | 4,000 | 4,040 |
| Electronic Databases | 233,689 | 245,248 | 258,684 |
| **TOTAL** | **$ 526,985** | **$ 541,165** | **$ 576,464** |

Additional annual expenditures budgeted by the library for Architecture include approximately $12,000, which is 80% of the salary for the Visual Resources Supervisor.

**Assessment of Library Resources and Services**
Gutman Library has made it a priority to continuously build the collection of architecture books, journals, databases, and images. Architecture books are heavily used and currently account for the majority of total book sign-outs and use, while architecture students make up only 18% of the student population. The Collection Development Coordinator and CABE librarian liaison select and order materials in response to faculty recommendations and in support of CABE curricula. See details below on the number of architecture and design books added to the collection, including the % of the total books this represents.

## PART ONE/I: SECTION 3: Institutional and Program Characteristics

### 3.1 Statistical Reports
NA

### 3.2 Annual Reports
NA

### 3.3 Faculty Credentials
Credentials of full-time and adjunct M.Arch. faculty may be found in Part Three of this document. This also includes faculty teaching cross-listed B.Arch./M.Arch. courses.

# II EDUCATIONAL OUTCOMES AND CURRICULUM

## PART ONE/II: SECTION 1: Student Performance—Educational Realms

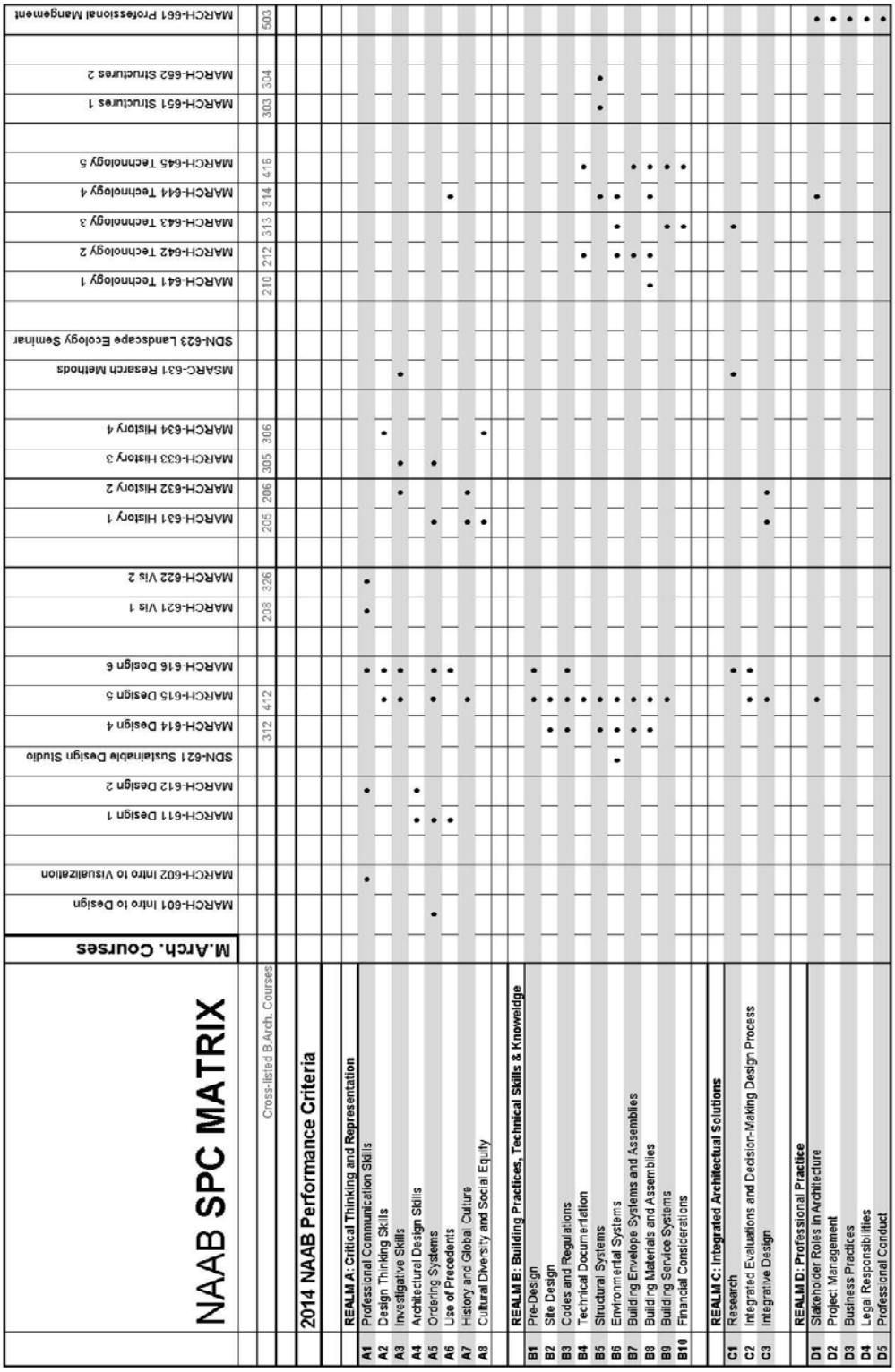
### 1.1 Student Performance Criteria [SPC]

Building on the Philadelphia University fully-accredited 5-year Bachelor of Architecture program, the Master of Architecture like the B.Arch. aims to prepare students to enter the professional world of architecture through a process that relies on increasingly independent work and iterative exercises. Students will arrive in the M.Arch. program with different and varying skill sets from a range of undergraduate disciplines. With two possible tracks, it is critical that students will graduate with the same pedagogical outcomes. With an emphasis on high-level sustainable design and technology skills, knowledge of project management and innovative delivery methods, and collaborative experiences in an interdisciplinary environment, the M.Arch. curriculum and courses were developed with the 2014 NAAB student performance criteria as an integral constituent to the structure of the program. Continued assessment of B.Arch. courses have resulted in measurable outcomes as well as subsequent adjustments and refinements. This has allowed us to make knowledge-based assignments of the 2014 SPC to the M.Arch. and B.Arch. simultaneously (cross-listed courses carry the same SPC). However, it must be noted that faculty responsible for course coordination in the B.Arch. and M.Arch. programs will be working together along with the architecture program directors to further fine-tune SPC in their courses during the summer of 2015. Some minor adjustments may result. The following is a summary of pedagogical objectives that align with the M.Arch. SPC:

- By the end of 1st year: fundamental architectural vocabulary and principles; developing architectural drawing and model-building skills; developing digital methods of representation; developing design-based time-management skills; understanding that design involves concept, development, and craft; basic ability to site a building and relate interior and exterior spaces; basic ability to relate architectural form, program, materiality, and structure; basic understanding of historical, cultural, and physical contexts.
- By the end of 2rd year: increased architectural vocabulary, principles, and strategies; design buildings that demonstrate sustainable strategies in their social and environmental settings; use analog and digital methods of design and representation, and as an analytical tool; basic understanding of the theoretical underpinnings of recent and contemporary practice; demonstrate an advanced understanding of many technical aspects of design; demonstrate an awareness of urban and global issues in architecture.

- By the end of 3th year: Demonstrate the ability to collaborate in teams to produce a comprehensive design for a building; show a more sophisticated tectonic approach to design, including the incorporation of BIM; demonstrate an understanding of professional practice issues including the ethical issues in the exercise of professional judgment in architectural design; approach architectural design in a holistic way, in a project or research-based thesis studio.

The NAAB SPC Matrix for the M.Arch. program is shown below:



| NAAB SPC MATRIX | M.Arch. Courses | MARCH-601 Intro to Design | MARCH-602 Intro to Visualization | MARCH-611 Design 1 | MARCH-612 Design 2 | SDN-621 Sustainable Design Studio | MARCH-614 Design 4 | MARCH-615 Design 5 | MARCH-616 Design 6 | MARCH-621 Vis 1 | MARCH-622 Vis 2 | MARCH-631 History 1 | MARCH-632 History 2 | MARCH-633 History 3 | MARCH-634 History 4 | MSARC-631 Research Methods | SDN-623 Landscape Ecology Seminar | MARCH-641 Technology 1 | MARCH-642 Technology 2 | MARCH-643 Technology 3 | MARCH-644 Technology 4 | MARCH-645 Technology 5 | MARCH-651 Structures 1 | MARCH-652 Structures 2 | MARCH-661 Professional Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cross-listed B.Arch. Courses | | | | | | | 312 | 412 | | | | 205 | 206 | 305 | 306 | | | 210 | 212 | 313 | 314 | 416 | 303 | 304 | 503 |
| 2014 NAAB Performance Criteria | | | | | | | | | | | | | | | | | | | | | | | | | |
| **REALM A: Critical Thinking and Representation** | | | | | | | | | | | | | | | | | | | | | | | | | |
| A1 Professional Communication Skills | | • | | | • | | | | • | • | | | | | | | | | | | | | | | |
| A2 Design Thinking Skills | | | | | | | • | • | • | | | | | | • | | | | | | | | | | |
| A3 Investigative Skills | | | | | | | | • | • | | | | • | • | | • | | | | | | | | | |
| A4 Architectural Design Skills | | | | • | • | | | | | | | | | | | | | | | | | | | | |
| A5 Ordering Systems | | | • | | | | | • | • | | | • | | • | | | | | | | | | | | |
| A6 Use of Precedents | | | | • | • | | | | • | | | | | | | | | | | | • | | | | |
| A7 History and Global Culture | | | | | | | | • | | | | • | • | | • | | | | | | | | | | |
| A8 Cultural Diversity and Social Equity | | | | | | | | | | | | • | | | | | | | | | | | | | |
| **REALM B: Building Practices, Technical Skills & Knowledge** | | | | | | | | | | | | | | | | | | | | | | | | | |
| B1 Pre-Design | | | | | | | • | • | • | | | | | | | | | | | | | | | | |
| B2 Site Design | | | | | | | • | • | | | | | | | | | | | | | | | | | |
| B3 Codes and Regulations | | | | | | | • | • | • | | | | | | | | | | | | | | | | |
| B4 Technical Documentation | | | | | | | | • | • | | | | | | | | | • | | | | • | | | |
| B5 Structural Systems | | | | | | | • | • | | | | | | | | | | | | | | | • | • | |
| B6 Environmental Systems | | | | | | | | • | • | | | | | | | | | • | • | | | | | | |
| B7 Building Envelope Systems and Assemblies | | | | | | | • | • | • | | | | | | | | | • | • | | | • | | | |
| B8 Building Materials and Assemblies | | | | | | | • | • | • | | | | | | | | | • | • | | | • | | | |
| B9 Building Service Systems | | | | | | | | • | | | | | | | | | | | | • | | • | | | |
| B10 Financial Considerations | | | | | | | | | | | | | | | | | | | | • | | • | | | |
| **REALM C: Integrated Architectural Solutions** | | | | | | | | | | | | | | | | | | | | | | | | | |
| C1 Research | | | | | | | | | • | | | | | | | • | | | | | | | | | |
| C2 Integrated Evaluations and Decision-Making Design Process | | | | | | | | • | • | | | | | | | | | | | • | | | | | |
| C3 Integrative Design | | | | | | | | • | | | | | • | | | | | | | | | | | | |
| **REALM D: Professional Practice** | | | | | | | | | | | | | | | | | | | | | | | | | |
| D1 Stakeholder Roles in Architecture | | | | | | | | | • | | | | | | | | | | | | • | | | | • |
| D2 Project Management | | | | | | | | | | | | | | | | | | | | | | | | | • |
| D3 Business Practices | | | | | | | | | | | | | | | | | | | | | | | | | • |
| D4 Legal Responsibilities | | | | | | | | | | | | | | | | | | | | | | | | | • |
| D5 Professional Conduct | | | | | | | | | | | | | | | | | | | | | | | | | • |

# PART ONE/II: SECTION 2: Curricular Framework

## 2.1 Regional Accreditation

The University is accredited by the Middle States Association of Colleges and Schools (MSACS). This document is included on page 6 of this report.

## 2.2 Professional Degrees and Curriculum

The M.Arch. program is designed as a 48 to 99 semester-credit curriculum and can be completed in two to three academic years. These credits are in addition to 120 semester-credits applied to a baccalaureate degree. Advanced placement depends on previous education and experience. The curriculum consists of:

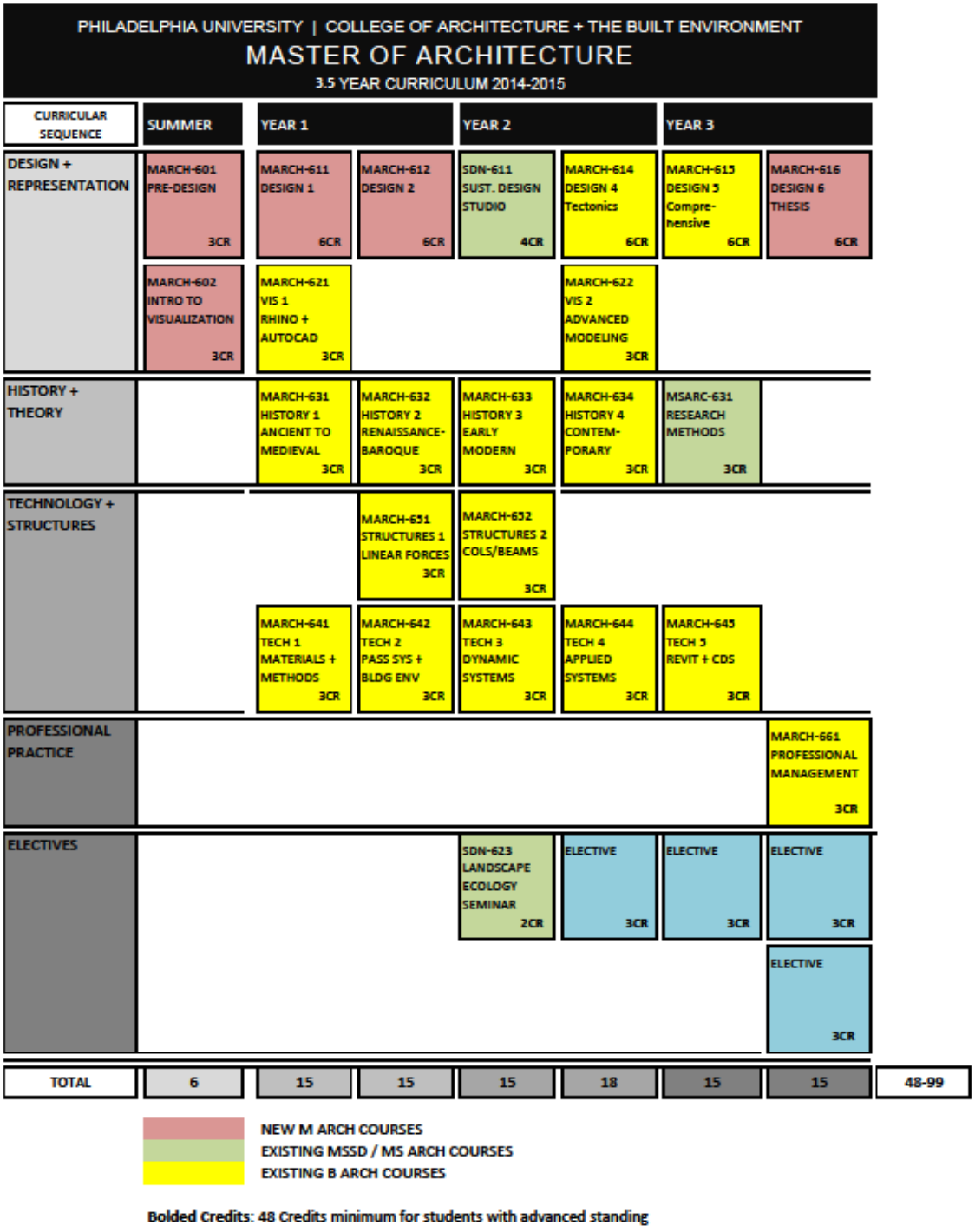
- (24) credits of new courses specifically for the new program
- (9) credits of new courses shared with other grad programs (CABE grad core)
- (54) credits of existing courses shared with undergrad programs (below 500-level courses)
- (10-12) credits of electives, which would be shared by grad or undergrad programs, depending on which courses the student chooses. (The M.Arch. program would encourage students to take elective courses in other CABE graduate programs: MS Architecture/High Performance Building; MS GeoDesign; MS Sustainable Design; MS Construction Management; MS Interior Architecture.)

The program takes two forms:

*Preprofessional-plus:*
Candidates for this degree have completed at least 168 semester credit hours, or the quarter-hour equivalent, of which at least 30 credit hours are taken at the graduate level, and hold a pre-professional degree in architecture or a related field before admission to the graduate degree program. The graduate-level academic course work must include professional studies and optional studies.

*Non-preprofessional degree-plus:*
Candidates for this degree have completed at least 168 semester credit hours, or the quarter-hour equivalent, of which at least 30 credit hours are taken at the graduate level, and hold an undergraduate degree from a regionally accredited institution before admission to the graduate degree program. The graduate-level academic

The curriculum mask shown on the following page represents the curriculum in its entirety and shows the sequence of courses. Course descriptions/outlines are found in Part Three.




## **2.3** Curriculum Review and Development

Currently, full-time B.Arch. faculty members coordinate different parts of the curriculum. They routinely observe student work (design work during reviews or other assignments, such as case studies or exams) and consult with all faculty (full and part-time) teaching courses under their supervision. This results in observations that are helpful for Middle States and NAAB accreditation as well as the archiving of student work for NAAB. Since the group of full-time faculty is relatively small, faculty are able to discuss the progress in the courses informally as well as during the scheduled monthly Architecture Program faculty meetings (these meetings include all Architecture Program Faculty). Once every three years, a more comprehensive evaluation takes place, and that experience is described below.

The Program's curricular review process has been directed by the Program Director. For the last major effort, full-time faculty were divided into sub-committees focused on the different sequences of the curriculum: studio, visualization, history/theory, technology and structures, and professional management. Sub-committees evaluated the relevant data (syllabi, assignments, examples from other institutions, relevant publications, etc), debated possible improvements, and then reported their recommendations to the entire full-time faculty. The Program Director integrated all the recommendations and organized a series of discussions at which time the full-time faculty agreed on a proposal. According to University procedures, that proposal was submitted to the College Curriculum Committee, which is composed of full-time faculty from across the College. The committee approved the proposal, which triggered the necessity to receive approvals from various stakeholders across campus, including directors of writing, information literacy, and information technology. The College Curriculum Committee chair presented the proposal to the University Curriculum Committee, composed of full-time faculty from across the institution as well as ad-hoc members from administrative positions. Although the University governance structure has since been revised, all future curricular reviews and revisions would follow a similar process.

Assessment of changes occurs after a new course or significantly altered course has been offered, peer evaluations completed and student evaluations tabulated. Possible improvements can be identified and the cycle can begin again immediately.

## PART ONE/II: SECTION 3: Evaluation of Preparatory/Pre-professional Education

The M.Arch. program is designed for students with non-architectural baccalaureate degrees. Applicant's transcripts will be evaluated by the University Office of Graduate Admissions; portfolio and undergraduate equivalency course work will be evaluated by the Director of Architecture and M.Arch. Associate Director. Application requirements and evaluation criteria are outlined below:

- Bachelor's degree from any discipline
- Official academic transcripts
- Current resume
- Two letters of recommendation
- Personal statement (see below for full details)
- Portfolio (see below for full details)

*Personal Statement:* The personal statement should articulate why the student wants to become an architect, their goals and why they want to be a part of the Philadelphia University Master of Architecture program. The personal statement should be 500-1000 words.

*Portfolio Requirements:* The portfolio is a collection of previous work that relates to the skills necessary to succeed in the PhilaU Architecture Program. It is intended to document previous college work that has satisfied academic requirements or independent creative work exhibiting competencies that support the application. The purpose of the portfolio is to give evidence of promise and potential in architecture, as well as to give evidence of interests, skills, and talent. Students need not have architectural drawings or work. The portfolio should include examples of projects, coursework or independent creative work that showcases abilities and promise specific to the M.Arch. program. These might include drawings, photographs, sculpture, handcrafted items, written essays etc.

## PART ONE/II: SECTION 4: Public Information

Detailed information on the Master of Architecture program can be found on the University/College website: http://www.philau.edu/architectureandthebuiltenvironment/ > http://www.philau.edu/march/

### **4.1** Statement on NAAB-Accredited Degrees

The Master of Achitecture statement on NAAB accredited degrees is found at:
http://www.philau.edu/march/Accreditation.html

It has the following text:

*In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year, or two-year term of accreditation, depending on the extent of its conformance with established educational standards. Doctor of Architecture and Master of Architecture degree programs may require a preprofessional undergraduate degree in architecture for admission. However, the preprofessional degree is not, by itself, recognized as an accredited degree. Philadelphia University, College of Architecture and the Built Environment offers the following NAAB-accredited degree program: Bachelor of Architecture (165 undergraduate credits). We are currently applying for candidacy for the Master of Architecture program; the next accreditation visit in 2018.*

## **4.2** Access to NAAB Conditions and Procedures

To access NAAB's 2014 Conditions and NAAB's 2012 Procedures for Accreditation:
http://www.naab.org/home.aspx

## **4.3** Access to Career Development Information

To gain a better understanding of the context of architecture education and career paths available to graduates of accredited programs, the University Career Services maintains a webpage at: http://www.philau.edu/careerservices/resourcesbymajor.html#architecture with links to numerous online resources including: www.ARCHCareers.org; www.NCARB.org; www.aia.org; www.aias.org; www.acsa-arch.org

The National Council of Architectural Registration Board (NCARB—link above) site provides access to *The NCARB Handbook for Interns and Architects, The Emerging Professional's Companion*, and other important sources, click here: www.NCARB.org

## **4.4** Public Access to APRs and VTRs

To access our B.Arch. Program's Annual Reports, NAAB's responses to our Annual Reports, the most recent NAAB decision letter regarding our B.Arch. program, our most recent Architectural Program Report (APR), and/or the most recent Visiting Team Report, please contact Prof. James Doerfler, Architecture Program Director at doerflerj@philau.edu. (These reports, responses, and letters are kept in the Director's Office at the Architecture and Design Center (A+D) and are made available upon request.) All current and future M.Arch. materials will be similarly archived.

**ARE Pass Rates**
NCARB publishes pass rates for each section of the Architect Registration Examination (ARE) by institution. NAAB acknowledges that ARE pass rates do not provide a complete measure of post-commencement success, nor can they be used to indicate the quality of a particular program. The ARE is designed to assess preparation for independent practice. Nevertheless, this information can be helpful to prospective students as part of their planning for graduate education, and it is one of the few resources available to students and prospective students regarding the transition from education to registration. The current University B.Arch. pass rates may provide some guidance for students considering the M.Arch. program.

NCARB pass rates: http://www.ncarb.org/ARE/ARE-Pass-Rates/Pass-Rates-by-School.aspx

**Graduate Admissions Process**
Philadelphia University subscribes to a "rolling admissions" policy, meaning that there is no set application deadline. The University's Admissions Committee reviews applications for a given term until all seats are filled. However, some academic programs (such as Architecture), as well as on-campus housing, have limited

capacity and may close prior to reaching total capacity. The Admissions Committee begins reviewing applications for fall terms in October and for spring terms in August. The Financial Aid Office is committed to educating students and their families in the best ways to fund their college education. Over 85% of our students receive aid in the form of grants, loans, campus employment and/or scholarships. In order to apply for aid a Free Application for Federal Student Aid (FAFSA) must be completed. The FAFSA can be filed electronically at www.fafsa.gov. Philadelphia University's priority deadline for applying for financial aid is April 15. Once the student has been accepted to the University, the Office of Financial Aid determines his/her eligibility and awards the student accordingly. All students in a degree seeking program are evaluated for financial aid eligibility from the University, the Federal Government and the State Grant programs. Students receive a Financial Aid award letter approximately four weeks after filing the FAFSA that will detail aid eligibility. (See the Annual Reports in section I.3.2 for additional information on financial aid recipients.)

Philadelphia University does not offer formal preparatory or pre-professional programs. For the M.Arch, summer foundation courses in design and visualization are offered. Students without a design background or degree are required to complete these courses; international students and/or students returning after some absence from design work and who may lack design confidence would be encouraged to take these courses.

The Disability Services Office (DSO) facilitates equal access opportunities to the education, programs, and activities of Philadelphia University for students with disabilities. DSO provides services and programs to students with physical impairments, as well as those with learning and psychological disabilities.

For more information: http://www.philau.edu/graduate/

**Advising**
See: **PART ONE/I: SECTION 2: Resources** 2.1 Human Resources and HR Development: Resources to Support Student Learning/ Academic Learning and Advising.

# **PART TWO** Timeline for Achieving Initial Accreditation

Working closely with NAAB and University administration, The Program Director and M.Arch. Program Associate Director have developed the following timeline for achieving initial accreditation. It is our intention to follow the timeline, adhering to all dates for document submissions and NAAB visits. We will notify NAAB immediately should we find ourselves unable to comply with any of the requirements set forth.

| Dates | Action |
|---|---|
| Jan-March 2015 | Application submitted |
| July 2015 | Eligibility decision |
| 180 days before the visit | *APR for Initial Candidacy Submitted* |
| February-April 2016 | Visit for Initial Candidacy |
| July 2016 | Initial Candidacy Decision (effective 1.1.16) |
| September 2017 | Application for Initial Accreditation in 2018 |
| March 1, 2018 | APR for Initial Accreditation submitted |
| October-November 2018 | Visit for Initial Accreditation |
| February 2019 | Initial Accreditation Decision (effective 1.1.18) |
| September 2020 | APR due |
| February-April 2021 | 1st Visit for Continuing Accreditation |
| July 2021 | Decision on 1st Term of Continuing Accreditation |

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|
| Eligibility | App. filed | Visit | | | | | |
| | Decision | Decision | | | | | |
| Candidacy | APR –IC submitted | Initial Candidacy visit | | | | | |
| | | Initial candidacy decision | | | | | |
| Initial Accreditation | | | App. filed | APR Due | Decision | | |
| | | | | Visit | | | |
| Students | 1st cohort enrolled | 2nd cohort enrolled | 3rd cohort enrolled | | | | |
| Graduates | | | | 1st cohort graduates (NAAB-accredited degree) | 2nd cohort graduates | 3rd cohort graduates | |
| 1st Term of Continuing Accreditation | | | | | | APR due | Visit |
| | | | | | | | Decision |

**Note:** The next B.Arch. program accreditation visit is scheduled for Spring 2018.

# **PART THREE** Supplemental Information

## **A.** Course Descriptions

Course descriptions are organized by design studio courses, visualization courses, architectural history/research courses, technology/structures courses, and professional management (cross-listed B.Arch./M.Arch. courses, existing MSSD Sustainable Design Studio, MSSD Landscape Ecology Seminar and MSARC Research Methods, as well as forthcoming M.Arch.-specific courses are included). Elective courses have not been included. Course descriptions are found on pages 41-64.

## **B.** Faculty Resumes

Full-time faculty who are currently teaching cross-listed B.Arch. cross-listed with M.Arch. courses or scheduled to be teaching courses in the M.Arch. curriculum are included. Some courses (especially those with multiple sections) rely on adjunct faculty (to be determined). Faculty resumes are found on pages 65-75.

# Course Description

## MARCH-601 Introduction to Design, 3 credits

### Course Description

Foundation design studio course is an introduction to fundamental design principles and vocabulary, representational methods and skills, as well as process methodologies and problem-solving strategies.

### Course Goals & Objectives

Students will explore concepts and methods of design through a series of design prompts. These projects will address the following basic design issues: form, order, hierarchy, scale, rhythm, light, shadow, texture, color, materiality, representation, and the creative process. Students will be introduced to the process of critique through desk crits, informal pin-ups and formal juried presentations of projects.

The primary objectives of this course are listed below. Students will:

- Effectively demonstrate the fundamentals of visual perception and the systems of order that inform two and three-dimensional design, architectural composition, and urban design.
- Provide evidence of the ability to select and use appropriate representational media to convey essential formal elements at each stage of the design process.
- Demonstrate the development of a design process methodology for resolving theoretical and practical problems.
- Exhibit developmental design communication skills in the ability to read, write, listen, and speak effectively on fundamental design principals, problems, and solutions.
- Demonstrate an awareness of historic precedents as a resource in the design process.

### Student Performance Criterion/ Addressed

A.5 Ordering Systems

### Topical Outline

Elements, Language, and Tools of Architecture: 20%
Form/Shape, Dimensional Transformation, and Iteration: 20%
Form, Space, Volume, Scale, and Representation: 20%
Organizing Principals: 20%
Light and Color: 20%

### Prerequisites

Enrollment in the M.Arch. program or permission of the M.Arch. program director.

### Textbooks / Learning Resources

Ching, Francis ARCHITECTURE: FORM SPACE & ORDER
Ching, Francis ARCHITECTURAL GRAPHICS
Koenig, Becky COLOR WORKBOOK

### Offered

Summer session, annually

### Faculty Assigned

Evan Pruitt

# Course Description

## MARCH-611 Design 1, 6 credits

### Course Description
Emphasis is placed on designing dense, sustainable, and socially responsible housing and mixed-use urban communities as generators for urban growth and renewal.

### Course Goals & Objectives
General issues concerning “dwelling” and specific issues addressing residential design are explored. This course also focuses on research and analysis of human patterns of occupancy, adaptation, and settlement. Three design projects will be assigned in this course in addition to accompanying research/analysis projects—all of the projects (design and research) will address the city as a future construct for human settlement. Students will participate in individual and group projects, reading, writing, discussions, field trips, lectures, individual and group critiques. Students will be introduced to Universal Design principles.

### Objectives
- Develop creative problem-solving ability in two and three-dimensional form and space.
- Students will demonstrate the fundamentals of visual perception and the principles and systems of order that informs two and three-dimensional design, architectural composition and urban design.
- Students exhibit the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects.

### Student Performance Criterion/a Addressed
A.4 Architectural Design Skills
A.5 Ordering Systems
A.6 Use of Precedents

### Topical Outline
Research 15%
Design Organization 15%
Residential Design 25%
Contextuality 15%
Sustainable Design Principles 15%
Urban Design Principles15%

### Prerequisites
Grade of “C” or better in MARCH 601 or permission of the M.Arch. program director.

### Textbooks / Learning Resources
Clark, Roger H. and Michael Pause. *Precedents in Architecture.* Hoboken: Wiley, 2005.
Lynch, Kevin. *The Image of the City*. Cambridge, Mass.: MIT Press, 1960.
Murtagh, William John. “The Philadelphia Row House.” *The Journal of the Society of Architectural Historians*, Dec. 1957, Vol. XVI, No. 4.
Rapoport, Amos. *House Form and Culture*. Englewood Cliffs, N.J.: Prentice-Hall, 1969.
*Additional readings assigned will be accessible on reserve in the library, BlackBoard, or through other means.*

### Offered
Fall semester, annually

### Faculty Assigned
Donald Dunham

# Course Description

## MARCH-612 Design 2, 6 credits

### Course Description
Focus on building in the landscape using the elements, principles and theories of architectural and landscape design. Techniques of representation are developed and refined.

### Course Goals & Objectives
Students continue to develop basic problem solving skills: analysis, conceptualization, synthesis, critical evaluation and representation. Spatial organization, the interrelationship of interior/ exterior space, structure and enclosure, context and site, perception and human behavior, meaning and use, and aesthetics and the craft of building are considered holistically. Universal Design principles, materiality, tectonics, technology, the environment, and perception will be stressed, as well as the importance of developing a consistent sustainable framework for the projects as a respective response to the environment and our culture.

- Develop the ability to respond to natural and built site characteristics in the development of a program and the design of a project.
- Demonstrate a developmental level of the principles underlying sustainability in making architectural and landscape decisions that conserve natural and built resources, including culturally important buildings and sites, and in the creation of healthful buildings and communities.
- Recognize and analytically interpret global architectural canons and traditions in architecture and landscape design, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them.
- Integrate theories and methods of inquiry into the design process that seek to clarify the relationship between human behavior and the physical environment.

### Student Performance Criterion/a Addressed
A.1 Professional Communication Skills
A.4 Architectural Design Skills
A.5 Ordering Systems
A.6 Use of Precedents

### Topical Outline
Site Analysis 15%
Site Design 15%
Sustainable Building and Site Design Principles 20%
Schematic Site/Building Design 50%

### Prerequisites
Grade of “C” or better in MARCH-611 Design 1 or permission of the M.Arch. program director.

### Textbooks / Learning Resources
Ching, Frank, *Architectural Graphics & Architecture, Form, Space and Order* (required)
Berrizbeitia & Pollak, *Inside Outside: Between Architecture and Landscape* (required)
Betsky, Aaron, *Landscrapers: Building with the Land*
Reiser + Umemoto, *Atlas of Novel Tectonics*

### Offered
Spring semester, annually

### Faculty Assigned
Donald Dunham/ TBD

# Course Description

## SDN-611 Sustainable Design Studio 1, 4 credits

### Course Description
This studio will emphasize interdisciplinary teaching, learning and collaborative work as a fundamental core concept of sustainable design.

### Course Goals & Objectives
1. Compile, describe and analyze statistics, factual data, and biological patterns that define the socio-economic, physical forces, measurable conditions, and technical systems, of a design project's biome, city/town, client, site, buildings.
2. Identify and prescribe guiding principles, metrics, and benchmarks for ecological systems, design projects, socio-economic programs, that define sustainable project delivery at multiple scales.
3. Synthesize results from analytical processes and from multiple perspectives into multiple design schemes.
4. Value the interdependence between regions, communities, landscapes, buildings, interiors, and products
5. Apply a variety of evaluation strategies including cost estimation, feasibility analysis, ecological resource impact, life-cycle costs, and assessment, performative analysis (shading, orientation, EUI, etc)
6. Compare results against benchmarking criteria in the development of the project proposal.
7. Integrate natural, cultural, and experiential information into the decision-making and design process to develop, test, and refine a sustainable program and design solution.
8. Manipulate and reconstruct spatial and temporal datasets using digital workflows to create flexible tools which can inform design decisions.
9. Apply team building and organizational skills for diverse groups through the integrated design process; and operate effectively within groups of varied disciplines.
10. Communicate project goals, parameters and constraints, through site analysis, diagramming and mapping activities, and in a context that is effective and appropriate to a varying range of audience, key project stakeholders, client, classmates, etc.

### Student Performance Criterion/a Addressed
B.6 Environmental Systems
B.10 Financial Considerations
C.2 Integrated Evaluations and Decision-Making Process

### Topical Outline
Site Analysis 15%
Site Design 15%
Sustainable Building and Site Design Principles 20%
Schematic Site/Building Design 50%

### Prerequisites
MARCH-612 Design 2

### Textbooks / Learning Resources
The Seven Group. *Integrative Guide to Green Building Design*.
Mark DeKay and G.Z. Brown. Sun Wind and Light Third Edition.
Beck, Travis. Principles of Ecological Landscape Design.

### Offered
Fall semester, annually

### Faculty Assigned
TBD

# Course Description

## MARCH-614 Design 4, 6 credits

### Course Description
This tectonics studio focuses on the theories surrounding the materials and processes of making architecture. Students investigate building materials to understand their roles in directing the design process.

### Course Goals & Objectives
1. Students demonstrate the ability to prepare a comprehensive program for an architectural project, including preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.
2. Students demonstrate the ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.
3. Students demonstrate an understanding of building envelope systems and the basic principles involved in their appropriate application, and the associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
4. Students demonstrate an understanding of building materials and assemblies, and assembly details, that is: the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.
5. Students demonstrate the ability to represent and clearly communicate design intentions through technically precise two and three-dimensional documents showing materials and methods of construction.

### Student Performance Criterion/a Addressed
B.2 - Site Design
B.3 - Codes and Regulations
B.5 - Structural Systems
B.6 - Environmental Systems
B.7 - Building Envelope Systems and Assemblies
B.8 - Building Materials and Assemblies

### Topical Outline
Schematic Site and Building Design 20%
Design Development 30%
Sustainable Design 10%
Building Structure and Envelope 25%
Building Codes 15%

### Prerequisites
MSSD-611 Sustainable Design Studio.

### Textbooks / Learning Resources
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated.*
Deplazes, Andrea, *Constructing Architecture*

### Offered
Spring semester, annually

### Faculty Assigned
David Kratzer/ TBD

# Course Description

## MARCH-615 Design 5, 6 credits

### Course Description
This comprehensive studio explores and examines the integration of systems in a building within the urban context. Site and program are explored as temporal forces.

### Course Goals & Objectives
Upon successful completion of this course, a student will be able to:

- Identify and Describe appropriate strategies for integrating complex building systems within an architectural project, specific to programmatic, environmental, and climatic constraints.
- Manage the complexity of multiple and dynamic building systems within an architectural context, taking a holistic approach to balance the needs of each system.
- Develop a comprehensive design project in a team setting, which adequately balances the static and temporal forces of a complex architectural project.
- Prepare Design Development documentation to adequately describe an architectural project including, detailing, envelope and enclosure assemblies, materials, structural, and mechanical systems.

### Student Performance Criterion/a Addressed
A.2 Design Thinking Skills
A.3 Investigative Skills
A.5 Ordering Systems
A.7 History and Global Precedents
B.1 Pre-Design
B.2 Site-Design
B.3 Codes and Regulations
B.4 Technical Documentation
B.5 Structural Systems
B.6 Environmental Systems
B.7 Building Envelope Systems and Assemblies
B.8 Building Materials and Assemblies
B.9 Building Service Systems
C.2 Integrated Evaluations and Decision-Making Process
C.3 Integrative Design
D.1 Stakeholder Roles in Architecture

### Topical Outline
Personal Life Support System 20%
Building Systems Analysis and Case Studies 20%
Modular Unit Design and Systems Integration 20%
Comprehensive Building Design Project 40%

### Prerequisites
MARCH-644 Tech 4 and a grade of “C” or better in MARCH-614 Design 4.

### Textbooks / Learning Resources
Grondzik, Kwok, et al, *Mechanical and Electrical Equipment for Buildings.*
Allen, Edward, *Fundamentals of Building Construction.*
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated.*
Deplazes, Andrea, *Constructing Architecture.*
AIA, Ramsey/Sleeper, *Architectural Graphic Standards*

### Offered
Fall and spring semesters

### Faculty Assigned
Matt Gindlesparger/ TBD

# Course Description

## MARCH-616 Design 6, 6 credits

### Course Description
The structure of this course is negotiated with a faculty advisor to inform student research leading to the development of an original comprehensive architectural design thesis project.

### Course Goals & Objectives
Students at the completion of this course will:

- Articulate, analyze critically and synthesize established theories and building science related to architecture.
- Review and critically analyze original research in architecture and related disciplines.
- Apply and synthesize architectural and building research.
- Conduct research that makes a contribution to the body of knowledge.
- Demonstrate expertise in a chosen area of architectural design or research.
- Demonstrate professional presentation and communication skills.
- Demonstrate the integration of knowledge, analysis and research through the final thesis project.
- Produce a comprehensive design or research solution to a given project or problem.

### Student Performance Criterion/a Addressed
A.1 Professional Communication Skills
A.2 Design Thinking Skills
A.3 Investigative Skills
A.5 Ordering Systems
A.6 Use of Precedents
B.1 Pre-Design
B.3 Codes and Regulations
C.1 Research
C.2 Integrated Evaluations and Decision-Making Process
C.3 Integrative Design

### Topical Outline
A comprehensive architectural solution to a given architectural project or problem 100%

### Prerequisites
MARCH 615 with a grade of “C” or better and MSARC 631

### Textbooks / Learning Resources
Laurel, Brenda. *Design Research: Methods and Perspectives*
Additional readings will either be handed out in class, on reserve in the library or available on the course Blackboard Site. Faculty advisor and student to determine resources applicable to thesis.

### Offered
Spring semester, annually

### Faculty Assigned
Donald Dunham/ TBD

# Course Description

## MARCH-602 Introduction to Visualization, 3 credits

### Course Description
This course will emphasize how to use a variety of tools, techniques and media while teaching how different production methodologies affect the design process.

### Course Goals & Objectives
This course is organized alongside the Introduction to Design Studio. The tools and techniques introduced in this course will be directly applicable to the design prompts in the studio. Topics such as sketching, hand drafting, line weight, scale, physical modeling, scanning, plotting, digital 2D drawing and 3D modeling will be covered.

The primary objectives of this course are listed below. Students will:

- Be introduced to the analog and digital tools of architectural production.
- Refine their digital and analog craft, with a strong emphasis on making with a specific purpose or outcome in mind.
- Provide evidence of the ability to select and use appropriate media to develop and represent formal elements.
- Produce legible and productive drawings and models that accurately communicate design concepts.
- Demonstrate an awareness of how designers use tools and techniques in their work.

### Student Performance Criterion/a Addressed
A.1 Professional Communication Skills

### Topical Outline
Hand drafting using pencil and ink 20%
Basic model making techniques 20%
Digital representation 20%
Digital form generating 20%
Project documentation techniques 20%

### Prerequisites
Enrollment in the M.Arch. program or permission of the M.Arch. program director.

### Textbooks / Learning Resources
Allen, Stan. *Practice: Architecture, Technique and Representation*
Reiser + Umemoto. *Atlas of Novel Tectonics*
Adams, Grant. *Digital Tools for Architects Handbook*

### Offered
Summer session, annually

### Faculty Assigned
Kihong Ku/ TBD

# Course Description

## MARCH-621 Visualization 1, 3 credits

### Course Description
The primary intent of this course is to establish the computer as an effective tool in the design and presentation process.

### Course Goals & Objectives
1. Demonstrate visual communication skills through the ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process
2. Develop a technical knowledge of precision digital drawing and construction in both 2-D and 3-D formats.
3. Introduce the use of various digital techniques and outputs depending on the requirements of the design process.
4. Develop a solid approach to digital technology that will serve as a foundation for future software and professional expectations.

### Student Performance Criterion/a Addressed
A.1 Professional Communication Skills

### Topical Outline
2D CAD drawing 20%
3D modeling 20%
Image post processing 20%
Photorealistic rendering and animation 20%
Graphic editing and portfolio construction 20%

### Prerequisites
Grade of “C” or better in MARCH 601 Intro to Design and MARCH 602 Intro to Vis, or permission of M.Arch. Program Director.

### Textbooks / Learning Resources
As assigned by your professor, there will be required readings concerning the history and evolution of digital culture, as well as research on contemporary designers who are using digital technologies.

### Offered
Fall and spring semesters

### Faculty Assigned
Kihong Ku/ TBD

# Course Description

## MARCH-622 Visualization 2, 3 credits

### Course Description
Utilizing advanced explicit modeling and rendering software, students will be instructed on how to develop the latest in conceptual design techniques to augment their skills to enrich their design process.

### Course Goals & Objectives
1. To develop the student's ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
2. To develop the student's understanding of the diverse theoretical foundations and social settings from which the meaning of architecture (as exhibited in the making of buildings, landscapes and human settlements) has been derived for the last century;
3. To develop the student's understanding of the shifts that occur – and have occurred – in the social, political, technological, ecological and economic factors that shape the practice of architecture.
4. To familiarize the student with the role of criticism and the relationship of criticism to theory;
5. To develop the student's ability to incorporate theoretical foundations into the design process; and
6. To develop the student's ability to examine architectural issues rationally, logically, and coherently and to communicate architectural ideas in written, oral and visual forms.
7. In addition, the intentions of the course are for the student to develop his/her own interpretation of the issues.

### Student Performance Criterion/a Addressed
A.1 Professional Communication Skills

### Topical Outline
Modeling and manipulating geometric constructs 50%
Parametric modeling 30%
Rendering 20%

### Prerequisites
MARCH-621 Visualization 1 or permission of the M.Arch. program director

### Textbooks / Learning Resources
Readings will either be handed out in class, on reserve in the library or available on the Course Blackboard Site.

### Offered
Fall and spring semesters

### Faculty Assigned
To be determined

# Course Description

## MARCH-631 History 1: The Built Environment: Ancient to Medieval, 3 credits

### Course Description
World architecture, interiors, and landscape design from Ancient to Medieval. Major monuments examined as solutions to technical problems, utilizing available materials, and as embodiments of cultural belief systems.

### Course Goals & Objectives
1. The ability to gather, assess, record, and apply relevant information in architectural coursework.
2. A global perspective for design, so designers have a global view and weigh design decisions within the parameters of ecological, socio-economic, and cultural contexts.
3. Distinguish, describe, and identify the parallel and divergent canons and traditions of architecture, landscape and urban design including indigenous, vernacular, local, regional, and national examples from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socio-economic, and cultural factors.
4. Recognize and explain the social, political, and physical influences affecting historical changes in design of the built environment – including movements and periods in interior design and furniture, movements and traditions in architecture, and movements and periods of art – so that entry-level designers can apply this knowledge within an historical and cultural context.
5. Compare and discuss the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects and designers.
6. Identify, describe, and analyze the relationships between human behavior, the natural environment, and the design of the built environment.

### Student Performance Criterion/a Addressed
A.5 Ordering Systems
A.7 History and Global Culture
A.8 Cultural Diversity and Social Equity

### Topical Outline
Organizing design principals 5%
Prehistoric cultures 10%
Early Cities in South and West Asia 10%
Early Cities in Egypt, the Mediterranean, and America 15%
Ancient Greece and the Hellenistic World 20%
Ancient Rome and China 20%
Middle Ages 20%

### Prerequisites:
Enrollment in the M.Arch. program or permission of the M.Arch. program director.

### Textbooks / Learning Resources
Ching, Francis D.K., Mark Jarzombek and Vikramaditya Prakash. *A Global History of Architecture*. John Wiley & Sons, 2011.
Whiton, Sherrill and Stanley Abercrombie. *Interior Design & Decoration***.** Prentice-Hall, 2007.
Kleiner, Fred S. *Gardner's Art Through the Ages: A Global Perspective*. Wadsworth Cengage Learning, 2012.

### Offered
Fall semester, annually

### Faculty Assigned
David Breiner/ to be determined

# Course Description

## MARCH-632 History 2 Built Environment: Renaissance & Baroque Architecture and Interiors, 3 credits

### Course Description
This course highlights significant examples of architecture and interiors produced from the 14th through the mid-18th centuries.

### Course Goals & Objectives
1. The ability to communicate effectively about design, to think critically, and to reach appropriate conclusions;
2. The ability to research by gathering, assessing, recording, and applying relevant information in architectural coursework;
3. Understanding the effects of the environment on human behavior and research methods used to further understanding of the interaction between the two;
4. Understanding of the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition and urban design;
5. Understanding of the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals, and the implication of this diversity for the societal roles and responsibilities of architects;
6. Understanding of the Western and non-Western architectural canons and traditions in architecture, landscape, and urban design from the 14th through the mid-18th centuries, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them; and
7. Understanding of the shifts in the social, political, technological, ecological, and economic factors that shape the practice of architecture (this is accomplished by forming comparisons between artists, architects, and designers, diverse periods and circumstances).

### Student Performance Criterion/a Addressed
A.3 Investigative Skills
A.7 History and Global Culture

### Topical Outline
The Renaissance 25%
Later Islamic Architecture, Ming Dynasty China 10%
Baroque Rome & The Baroque beyond Rome 25%
French Classicism 15%
Late Baroque & Rococo 10%
Revivals and the Picturesque 15%

### Prerequisites
MARCH 631 History 1

### Textbooks / Learning Resources
Ching, Francis D.K., Mark Jarzombek and Vikramaditya Prakash. *A Global History of Architecture*. John Wiley & Sons.
Whiton, Sherrill and Stanley Abercrombie. *Interior Design & Decoration*. Prentice-Hall.
Kleiner, Fred S. *Gardner's Art Through the Ages: A Global Perspective*. Wadsworth Cengage Learning.

### Offered
Spring semester, annually

### Faculty Assigned
David Breiner/ to be determined

# Course Description

## MARCH-633 History 3 Built Environment: Early Modern Architecture & Interiors, 1750-1930, 3 credits

### Course Description
This course chronicles the impact of Enlightenment thinking and of the shifting definitions of modernity upon architecture and interior design by tracing the transition from Historicism to the International Style.

### Course Goals & Objectives
1. Demonstrate an ability to gather, assess record, apply, and comparatively evaluate relevant information within architectural coursework and design processes;
2. Demonstrate an understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design, architectural composition, and urban design;
3. In exams, a semester-long case study, and discussions, demonstrate their understanding of the (primarily) Western canons and traditions of architecture, landscape and urban design including indigenous, vernacular, local, regional, and national examples during the period 1750 to 1930, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them;
4. Demonstrate an understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects; and
5. Demonstrate their understanding of the relationship between human behavior and the physical environment.
6. Develop the ability to describe, analyze and explain ideas that impact on the built environment.

### Student Performance Criterion/a Addressed
A.3 - Investigative Skills
A.5 - Ordering Systems

### Topical Outline
The Enlightenment and Neoclassicism 10%
Neoclassicism in America 10%
Radical Neoclassicism—David, Ledoux and Boullée 10%
Picturesque, Romanticism and Gothic Revival 10%
The Industrial Revolution and new technologies 20%
Arts and Crafts 10%
America and the City 10%
Art Nouveau, Deutscher Werkbund, Expressionism, Futurism, and Constructivism 20%

### Prerequisites
MARCH-632 History 2 or permission of the M.Arch. program director.

### Textbooks / Learning Resources
Bergdoll, Barry. *European Architecture 1750-1890.* Oxford University Press.
Colquhoun, Alan. *Modern Architecture.* Oxford University Press.
Ching, Francis D. K., Mark Jarzombek, and Vikramaditya Prakash. *A Global History of Architecture.* John Wiley and Sons
Kleiner, Fred. S. *Gardner's Art through the Ages: A Global History.* Wadsworth Cengage Learning.

### Offered
Fall semester, annually

### Faculty Assigned
David Breiner/ to be determined

# Course Description

## MARCH-634 History 4 Built Environment: Modern & Contemporary Architecture and Interiors, 3 credits

### Course Description
This course analyzes major movements and theoretical constructs that have dominated architecture and interior design from the post-World War II period until the present.

### Course Goals & Objectives
1. Develop an understanding of twentieth-century Western traditions in architecture, interior design, art, landscape, and urban design as well as the climatic, technological, socio-economic, and other cultural factors that shaped and sustained them;
2. Demonstrate proficient written and oral skills in the visual analysis and cultural context of twentieth century design;
3. Demonstrate the ability to make a comprehensive analysis and evaluation of a building, building complex, interior, or urban space;
4. Develop an awareness of the theories and methods of inquiry that seek to clarify the relationships between human behavior and the physical environment;
5. Develop an awareness of the diverse needs, values, behavioral norms, and social and spatial patterns that characterize different cultures, and the implications of this diversity for the societal roles and responsibilities of architects and designers;
6. Demonstrate an understanding of the shifts which have occurred since the nineteenth century in the social, political, technological, ecological, and economic factors that shape the practice of architecture and design;

### Student Performance Criterion/a Addressed
A.2 - Design Thinking Skills
A.8 - Cultural Diversity and Social Equity

### Topical Outline
Bauhaus/Modernism/Internationalization and Utopian Ideals 15%
American architecture before WW2 10%
European and American Modernism after WW2 15%
Global Modernism 10%
Post-Modernism 15%
High-Tech and Deconstructivism 15%
Ecology and Sustainability 10%
Architecture in the 21$^{st}$ century 10%

### Prerequisites
MARCH-633 History or permission of the M.Arch. program director.

### Textbooks / Learning Resources
Cohen, Jean-Louis. *The Future of Architecture since 1889.* Phaidon Press.
Kleiner, Fred S. *Gardner's Art Through the Ages*: *A Global History.* Wadsworth.
Colquhoun, Alan. *Modern Architecture*. Oxford University Press.

### Offered
Spring semester, annually

### Faculty Assigned
David Breiner/ TBD

# Course Description

## MSARCH-631 Architectural Research Methods, 3 credits

### Course Description
This seminar is focused on understanding independent research, inquiry, analysis, design exploration and synthesis in architecture.

### Course Goals & Objectives
- Students will investigate, interpret and document different approaches to research, hypothesis testing, design processes, and systems for design.
- Students will demonstrate research results that will lead to the development of a comprehensive thesis project.
- Students will develop and prepare their research proposals for their thesis project.

### Student Performance Criterion/a Addressed
A.3 Investigative Skills
C.1 Research

### Topical Outline
Research methodologies 15%
Data collection and analysis methodologies 20%
Evidenced-based findings and conclusions 20%
Organizational strategy of final research 20%
Completion of all research and final document 25%

### Prerequisite
Enrolled in the M.Arch. program or permission of the M.Arch. program director.

### Textbooks / Learning Resources
Readings will either be handed out in class, on reserve in the library or available on the Course Blackboard Site.

### Offered
Fall semester, annually

### Faculty Assigned
James Doerfler

# Course Description

## SDN-623 Landscape Ecology Seminar, 2 credits

### Course Description
Students will identify, characterize and interpret the rich interplay between spatial landscape patterns and process including where it originates, why it matters and how it changes over time.

### Course Goals & Objectives
1. Define what landscape is and how it is spatially organized at varying scales.
2. Describe various landscapes & spatial patterns from ecological, cultural and cognitive perspectives.
3. Identify and interpret characteristics impacting landscape systems and ecological processes: structure, functioning and change over time.
4. Identify and apply principles of landscape ecology to landscape planning, conservation and design processes.
5. Collaboratively work in small groups to distinguish, define and illuminate landscape patterns and processes associated with the concurrent MSSD Sustainable Design Studio.

### Student Performance Criterion/a Addressed
A.2 Design Thinking Skills

### Topical Outline
Landscape Systems and Patterns 33%
Biodiversity and the Hydrologic Cycle /Soils, Water, and Vegetation 33%
Sustainable Landscape Design (Green Infrastructure) 33%

### Prerequisites
MARCH-612 Design 2 or permission of the M.Arch. program director.

### Textbooks / Learning Resources
Dramstad, W.E., J.D. Olson, and R.T.T. Forman. Landscape Ecology Principles in Landscape Architecture and Land-Use Planning. Island Press.
Leopold, A. 1949. A Sand County Almanac. Oxford Univ. Press, New York.
Perlman, D.L. and J.C. Milder. 2005. Practical Ecology. Island Press, Washington, DC.

### Offered
Fall semester, annually

### Faculty Assigned
TBD

# Course Description

## MARCH-641 Technology 1: Materials and Methods, 3 credits

### Course Description
This course focuses on the presentation of the technical factors of construction that affect a building's structure.

### Course Goals & Objectives
1. Structural Systems: Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range and appropriate application of contemporary structural systems.
2. Building Envelope Systems: Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
3. Building Service systems: Understanding of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.
4. Building Materials and Assemblies: Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

### Student Performance Criterion/a Addressed
B.8 - Building Materials and Assemblies

### Topical Outline
The architect’s responsibilities 5%
Building and zoning codes 5%
Sustainability 5%
Site design 5%
Structural systems 15%
Mechanical Systems 15%
Architectural materials and methods 50%

### Prerequisites
MARCH 601 Intro to Design with a grade of "C" or better and MARCH 602 Intro to Vis; or permission of M.Arch. Program Director.

### Textbooks / Learning Resources
Allen, Edward, *Fundamentals of Building Construction.*
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated*

### Offered
Fall semester, annually

### Faculty Assigned
Chris Harnish/ TBD

# Course Description

## MARCH-642 Technology 2: Passive Systems and Building Enclosure, 3 credits

### Course Description
This lecture/lab course examines technological issues relevant to passive environmental systems and sustainable technologies.

### Course Goals & Objectives
1. Understand the principles of site grading and drainage; and the architects' responsibilities with respect to environmental and resource conservation in architecture and urban design.
2. Understand the principles, conventions, standards, applications, and sustainable issues in the manufacture and use of construction materials, components, and assemblies.
3. Develop an understanding of the philosophical and theoretical issues surrounding the development and application of environmental technology as well as their ability to articulate a position regarding its appropriate use and value (as differentiated from cost).

### Student Performance Criterion/a Addressed
B.4 - Technical Documentation
B.6 - Environmental Systems
B.7 - Building Envelope Systems and Assemblies
B.8 - Building Materials and Assemblies

### Topical Outline
The architect’s responsibilities 5%
Building and zoning codes 10%
Sustainability10%
Site design 5%
Structural systems 20%
Mechanical Systems 20%
Architectural materials and methods 30%

### Prerequisites
MARCH-641 Technology 1

### Textbooks / Learning Resources
Ching, Frank. *Building Construction Illustrated.* Van Nostrand Reinhold.
Allen, Edward. *Fundamentals of Building Construction: Materials and Methods.* John Wiley & Sons.
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated*
AIA, Ramsey/Sleeper, *Architectural Graphic Standards*

### Offered
Spring semester, annually

### Faculty Assigned
Craig Griffen/ TBD

# Course Description

## MARCH-643 Technology 3: Dynamic Environmental Systems, 3 credits

### Course Description
This lecture/lab course presents basic theory and application parameters associated with the dynamic building systems within the architectural environment.

### Course Goals & Objectives
1. *C*omprehension of the principles of sustainability in architecture and urban.
2. *Analyze and assess* client and user needs, space and equipment requirements, site and design criteria, and relevant laws and standards and assess their implication for the project.
3. Develop the student's ability to research, assess, select, configure and detail site, structural, environmental, building envelope, building service and life safety systems.
4. *Identify and describe* the basic principles of life-safety systems with an emphasis on egress.
5. *Demonstrate an understanding of the* principles of passive environmental systems' design
6. *Demonstrate* the basic principles in the application of building envelope systems and assemblies
7. *Demonstrate* the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.
8. *Identify and Describe* building systems in support of maintaining human health and wellbeing within buildings.

### Student Performance Criterion/a Addressed
B.6 - Environmental Systems
B.9 - Building Service Systems
B.10 - Financial Considerations
C.1 - Research

### Topical Outline
Human comfort mapping and psychrometrics 10%
Solar geometry and daylighting 20%
Electric lighting 15%
Envelopes, wall sections and thermal gradients 20%
HVAC 15%
Plumbing 10%
Fire protection 10%

### Prerequisites
MARCH-642 Technology 2.

### Textbooks / Learning Resources
Grondzik, Kwok, Stein, Reynolds; *Mechanical and Electrical Equipment for Buildings,* John Wiley and Sons.
Allen, Edward. *Fundamentals of Building Construction: Materials and Methods.* John Wiley & Sons.
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated*
AIA, Ramsey/Sleeper, *Architectural Graphic Standards*

### Offered
Fall semester, annually

### Faculty Assigned
Matt Gindlesparger/ to be determined

# Course Description

## MARCH-644 Technology 4: Advanced Building Analysis, 3 credits

### Course Description
This course presents advanced theory, design and application parameters associated with structures, environmental systems and enclosure within the architectural environment.

### Course Goals & Objectives
1. Projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.
2. The principles of structure, environmental systems and building enclosure and the manner in which these building elements respond to environmental, contextual and programmatic design issues.
3. The coordination of structural, environmental and building enclosure systems and the manner in which these building elements interrelate.
4. Comprehension of the relationship between structure, environmental systems, and enclosures.
5. Building systems technology as a form determinant.
6. The role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

### Student Performance Criterion/a Addressed
A.6 - Use of Precedents
B.5 - Structural Systems
B.6 - Environmental Systems
B.7 – Building Envelope Systems and Assemblies
B.8 - Building Materials and Assemblies
D.1 - Stakeholder Roles in Architecture

### Topical Outline
Human comfort mapping and psychrometrics 10%
Solar geometry and daylighting 20%
Electric lighting 15%
Envelopes, wall sections and thermal gradients 20%
HVAC 15%
Plumbing 10%
Fire protection 10%

### Prerequisites
MARCH-643 Technology 3.

### Textbooks / Learning Resources
Grondzik, Kwok, et al, *Mechanical and Electrical Equipment for Buildings.*
Allen, Edward, *Fundamentals of Building Construction.*
Bell & Rand, *Materials for Design.*
Ching, Francis, *Building Construction Illustrated, Building Codes Illustrated.*
Deplazes, Andrea, *Constructing Architecture.*
AIA, Ramsey/Sleeper, *Architectural Graphic Standards*
Frampton, Kenneth, *Studies in Tectonic Culture*

### Offered
Spring semester, annually

### Faculty Assigned
David Kratzer/ to be determined

# Course Description

## MARCH-645 Technology 5: Documentation and Detailing, 3 credits

### Course Description
This course focuses on the important role of structural, environmental, and constructional systems in the design process through the creation of technically precise computer generated drawings and models.

### Course Goals & Objectives
1. Demonstrate technical documentation through the ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.
2. Demonstrate an understanding of financial considerations such as the fundamentals of building costs, including acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.
3. Demonstrate an understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
4. Demonstrate an understanding of the basic principles and appropriate application and performance of building service systems.
5. Demonstrate an understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.
6. Students successfully completing this course will also be develop:
7. Ability to use Building Information Modeling technology as a design and representational media to convey essential geometric intent and technical information at each stage of the design process.
8. Ability to assess, select, and conceptually integrate structural systems, building envelope systems, and environmental systems into building design.

### Student Performance Criterion/a Addressed
B.4 - Technical Documentation
B.7 - Building Envelope Systems and Assemblies
B.8 - Building Materials and Assemblies
B.9 - Building Service Systems
B.10 - Financial Considerations

### Topical Outline
Technical documentation 30%
Building envelope systems and assemblies 20%
Building materials and assemblies 20%
Building service systems 20%
Financial considerations 10%

### Prerequisites
MARCH-644 Technology 4 and MARCH-622 Visualization 2.

### Textbooks / Learning Resources
Distributed PDF files or through online sources;  Autodesk Revit Architecture 2015

### Offered
Fall and Spring semesters

### Faculty Assigned
Kihong Ku/ to be determined

# Course Description

## MARCH-651 Structures 1, 3 credits

### Course Description
This course merges structural form and analysis as a simultaneous act and introduces the role of structural engineering in the architectural process

### Course Goals & Objectives
1. Develop the student's understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.
2. Develop the student's understanding of the entire design process for a whole structure, starting with the formation of structural ideas and continue the development of structural ideas into workable solutions, preliminary design of details and preliminary determination of member sizes.
3. Merge the fundamentals of statics and strength of materials naturally in the context of the structural design process.
4. Design and analyze structures through graphical methods and numerical methods where needed in the design process.

### Student Performance Criterion/a Addressed
B.5 - Structural Systems

### Topical Outline
Loads, forces, vectors, and free body diagrams 5%
Static equilibrium, component of forces 5%
Mechanical properties of materials 20%
Arches and vaults 10%
Truss analysis 15%
Columns and beams 15%
Shear and moments 20%
Lateral loads 10%

### Prerequisites
Completion of one-semester college-level courses in physics and introduction to calculus.

### Textbooks / Learning Resources
Allen, Ed, Waclaw Zalewski and Boston Structures Group. Form and Forces Designing Efficient Expressive Structures. Wiley.
Schodek, Daniel and Martin Bechthold. Structures. Prentice Hall.
Scientific calculator, Tracing paper, green engineer's calculation pad, protractor, rolling ruler & decimal scale

### Offered
Spring semester, annually

### Faculty Assigned
Armando Plata/ to be determined

# Course Description

## MARCH-652 Structures 2, 3 credits

### Course Description
This course presents the effect of cross-sectional properties on stresses in beams as well as the concept of bending as it is applied to beams, columns, slabs and walls in wood, steel and reinforced concrete.

### Course Goals & Objectives
1. Demonstrate the basic principles of structural behavior in resisting gravity and lateral forces and evaluate the evolution, range, and appropriate application of contemporary structural systems.
2. Analyze and evaluate the entire design process for a whole structure, starting with the formation of structural ideas and continuing with the development of structural ideas into workable solutions, preliminary design of details and preliminary determination of member sizes.
3. Merge the fundamentals of statics and strength of materials in the context of the structural design process.
4. Design and analyze structures through graphical and numerical methods, as needed in the design process.

### Student Performance Criterion/a Addressed
B.5 - Structural Systems

### Topical Outline
Principal stresses, isostatics 5%
Structural framing 10%
Lateral loads 15%
Shear and moment diagrams 10%
Wood structural systems 20%
Steel structural systems 20%
Concrete structural systems 20%

### Prerequisites
MARCH-651 Structures 1.

### Textbooks / Learning Resources
Schodek, Daniel; Bechtold, Martin *Structures.* Prentice Hall.
Allen, Edward; Waclaw Zalewski and Boston Structures Group. *Form and Forces Designing Efficient Expressive Structures.* Wiley.

### Offered
Fall semester, annually

### Faculty Assigned
Armando Plata/ to be determined

# Course Description

## MARCH-661 Professional Management, 3 credits

### Course Description
This course focuses on the nature of the architect's practice and on office proprietorship typologies, through detailed studies of legal, financial, marketing and management issues.

### Course Goals & Objectives
1. Students will evaluate and compare the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods.
2. Students will comprehend the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.
3. Students will analyze and elaborate upon the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.
4. Students will investigate the architect’s responsibility to the public and the client as determined by registration law, building and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.
5. Students will evaluate the ethical issues involved in the formation of professional judgment regarding social political and cultural issues in architectural design and practice.
6. Students will use the graphical, written, and oratory language of the architectural profession, and the representative materials used in employment applications and interviews.

### Student Performance Criterion/a Addressed
D.1 - Stakeholder Roles in Architecture
D.2 - Project Management
D.3 - Business Practices
D.4 - Legal Responsibilities
D.5 - Professional Conduct

### Topical Outline
The building project team 10%
Architectural firms and consultants, types 10%
Project delivery methods and management 30%
Contracts 20%
Licensure 15%
Legal and ethical responsibilities 15%

### Prerequisites
MARCH-614 Design 5

### Textbooks / Learning Resources
Required readings will be distributed through Blackboard.

### Offered
Fall and Spring semesters

### Faculty Assigned
Jason Smith/ to be determined

# Faculty Resume

## David M. Breiner, Ph.D.

### Courses Taught (FL 2013 – SP 2015)

ARCST-341 American Architecture
ARCST-410 Vernacular Architecture

### Educational Credentials:

Rome Studies Program, University of Notre Dame, 1978-79
B. Arch, University of Notre Dame, 1981
M.A., History of Architecture and Urban Development, Cornell University, 1985
Ph.D, History of Architecture + Urbanism, Cornell University, 1994

### Teaching Experience:

Professor of Art History, Savannah College of Art & Design, 1992-1993
Assistant Professor, Philadelphia University, 1995-2001
Associate Professor, Philadelphia University, 2001-present
Interim Executive Dean, College of Architecture and the Built Environment, Philadelphia U., summer 2012
Associate Dean, School of Architecture, Philadelphia University, 2008-2010, 2013-present
Interim Director, Architecture Program, Philadelphia University, 2009-2010
Director, Architecture Program, Philadelphia University, 2010-2013

### Professional Experience:

Architectural Designer, Madigan-Praeger Division, URS Company, New York City, 1981-1982
Architectural Designer, Martin A. DeSapio, A.I.A., Flemington, NJ, 1985
Architectural Historian, Landmarks Preservation Commission, New York City, 1987-1992, 1993-1995

### Selected Publications and Recent Research:

"Scamozzi and the Completion of Venice's 'Roman' Face." *Constructing Identity: Proceedings of the 86th ACSA Annual Meeting & Technology Conference*. Washington, D.C.: Association of Collegiate Schools of Architecture, 1998

"No Accidental Tourists: The Development of Roman Guidebooks for Cinquecento Architects," Annual Meeting, Society of Architectural Historians, 2000

"George Louis Heins and Christopher Grant LaFarge." *Dictionary of Contemporary Architecture*. Milan: Allemandi Editore, 2001

"Manhattan's Tudor City: A 1920's Urban Utopia," Annual Meeting, Society for Utopian Studies, 2003

"Architecture." *Berkshire Encyclopedia of World History*. 5 vols. William H. McNeill, senior ed. Great Barrington, Mass.: Berkshire, 2004

*Philadelphia University Campus Heritage Project Report*, Getty Trust's Campus Heritage Initiative, 2006

"Building Campus on Residential Estates," Annual Meeting, Society of Architectural Historians, 2009

*Architecture Program Report for Accreditation Review*, Philadelphia University, 2011

"Philadelphia's School House Lane, A Place Apart," Annual Meeting, Pennsylvania Historical Association, 2014

"Philadelphia's School House Lane: Architecture and Society" (working title), a planned publication based on the results of the Campus Heritage Project

### Professional Memberships:

Society of Architectural Historians, Philadelphia Chapter, President 2000-2002
Society of Architectural Historians, National Organization
Historical Society of Pennsylvania
National Trust for Historic Preservation
Vernacular Architecture Forum
Germantown Historical Society, Board of Directors, 2003-2007

# Faculty Resume

## James Doerfler, AIA

### Courses Taught (FL 2014 – SP 2015)
ARCH-507 Design 9
MSARC-631 Architectural Research Methods
MSARC-619/ARCH-419 High Performance Building Envelopes

### Educational Credentials:
B. A. Art History, University of Hartford, 1981
M. Arch, Syracuse University, 1985

### Teaching Experience:
Lecturer, University of Technology, Sydney, Australia, 2002-2005
Interim Architecture Department Head, University of Technology, Sydney, Australia, 2005
Associate Professor, California Polytechnic State University, San Luis Obispo, 2005-09
Professor, California Polytechnic State University, San Luis Obispo, 2009-13
Director, Master's Programs and Professor, California Polytechnic State University, San Luis Obispo, 2011-13
Interim Head of Department and Professor, California Polytechnic State University, San Luis Obispo, 2012-13
Director of Architecture Programs and Professor, Philadelphia University, 2013-present

### Professional Experience:
Project Architect, Rafael Vinoly Architects P.C. - New York, NY, 1985-1988
Project Architect, Richard Gluckman Architects - New York, NY, 1988-1993
Project Architect/Senior Architect, Peddle Thorp & Walker Architects- Sydney, NSW, 1996-1998
Project Architect, Morris Bray Architects - Sydney, NSW, 1998-2000
Principal Architect, James Doerfler Architects, San Luis Obispo, CA, 2005-2013, Sydney, NSW, 2000-2005 & New York, NY, 1989-1996

### Licenses/Registration:
Registered Architect – New York

### Selected Publications and Recent Research/Practice:
Co-Editor with Thomas Fowler, "Design Collaboratory 2007-2010, Fourth Year Interdisciplinary Architecture and Architectural Engineering Studio," AeD Press, San Luis Obispo
2010 Author, "America's Cup Master Plan for San Francisco, Fourth Year Architecture Studio, Summer 2009," AeD Press, San Luis Obispo, 2010
Co-author with Kevin Dong – "The Interdisciplinary Design Studio – Understanding Collaboration," published in the proceedings of 2010 International Structures and Architecture Conference, Guimaraes, Portugal and ConnectEd 2010, Sydney
Author with Kevin Dong – "Teaching Integrated Practice in a Cross-Disciplinary Curriculum after Two Years," Paper presented at ACSA Annual Meeting 2009, published in the proceedings of 2010 International Structures and Architecture, Guimaraes, Portugal and ConnectEd 2010, Sydney
Author with Kevin Dong – "Teaching Integrated Practice in a Cross-Disciplinary Curriculum," Paper presented and published in the proceedings of ConnectEd 2007, International Conference on Design Education, Sydney, Australia, July 2007

### Professional Memberships:
American Institute of Architects
Building Technology Educators Society
Construction Specification Institute, student chapter advisor

# Faculty Resume

## Donald Dunham, AIA

### Courses Taught (FL 2012 – SP 2015)
ARCHDSN-210 Technology 1
ARCH-314 Technology 4
ARCH-214 Design 4
ARCH-311 Design 5
ARCH-312 Design 6

### Educational Credentials:
B.S. Architecture, University of Southern California, 1973
M. Arch, Victoria University of Wellington, 1996

### Teaching Experience:
Instructor, Victoria University of Wellington, 1995
Adjunct Faculty, Philadelphia University, 2002-2008
Assistant Professor, Philadelphia University, 2009-present

### Professional Experience:
Architectural Designer, Louis de Soissons Partnership, London, UK, 1973-1974; 1976-1978
Architectural Designer, Halpern & Partners, London, UK & Paris, France, 1974-1976
Planner & Project Designer, Peter Munselle Architecture, Los Angeles, CA, 1977-1980
Project Designer, EDC Architects, Los Angeles, CA, 1981-1982
Preparator, Museum of New Zealand Te Papa Tongarewa, Wellington, New Zealand, 1992-1996
Principal Preparator, The J. Paul Getty Museum, Los Angeles, CA, 1988-1992; 1996-1998
Project Manager, Archer & Buchanan Architecture, West Chester, PA, 2000-2003
Project Designer, Michael Ryan Architects, Phila, PA, 2004-2005
Principal, MERZBAUarchitecture, Landenberg, PA, 1998-present

### Licenses/Registration:
Registered Architect – Arizona #49376

### Selected Publications and Recent Research/Practice:
Gauer, James. “Modularity: Wing, Glesecke-Dunham Residence.” In *The New American Dream: Living Well in Small Homes*. Photographs by Catherine Tighe. New York: Monacelli Press, 2004. 65-77.

West, Judy. “The Mellow Modernist.” Photographs by Catherine Tighe. *Philadelphia Magazine: Home and Garden* 2 no. 1 (2004): 72-9.

“Inclusivity, Objectivity, and Perfection: The Museum as Utopian Space,” International Journal of the Inclusive Museum, Common Ground Publishing, University of Illinois, 2011. Awarded the International Award for Excellence by the Journal of the Inclusive Museum.

“Death of the Transhistorical City: Re-examining Lou Kahn’s Utopian Vision,” *IASTE Working Paper Series*, University of California at Berkeley, 2010.

“Architecture Without Nature” in *Earth Perfect? Nature, Utopia, and the Garden,* Annette Giesecke and Naomi Jacobs, eds. Black Dog Publishing, London, 2012, pp.

“Beyond the Red Curtain: Less is More Utopia,” The Journal of Utopian Studies, vol. 25, no. 1, State College: Pennsylvania State University Press, April 2014.

“The Good Architect?” in *The Good Gardener? Nature, Humanity, and the Garden,* Annette Giesecke and Naomi Jacobs, eds. Artifice Books on Architecture, London, March 2015.

### Professional Memberships:
American Institute of Architects

# Faculty Resume

## Matt E. Gindlesparger

### Courses Taught (FL 2010 – SP 2015)
ARCH 412 Design 8 for Architecture
ARCH 313 Technology 3: Dynamic Environmental Systems
ARCH 416 Tech 5: Documentation and Detailing

### Educational Credentials:
B.S., Southern Illinois University, 2003
B. Arch, University of Arizona, 2008
M. Arch, University of Arizona, 2008

### Teaching Experience:
Lecturer, University of Arizona, 2008
Studio Advisor & Project manager for UA Solar Decathlon Team, University of Arizona, 2008-2009
Capstone Engineering Team Sponsor, University of Arizona, 2009
Solar Car Team Coordinator & Capstone Engineering Team Sponsor, University of Arizona, 2010
Clinical Assistant Professor**,** CASE**,** Rensselaer Polytechnic Institute**,** 2010-present
Adjunct Faculty, Philadelphia University, 2010
Assistant Professor, 2014-present, Philadelphia University

### Professional Experience:
Project Manager & Co-Principal Investigator, SEED[pod] 2009 Solar Decathlon Project, University of Arizona, 2008-2009
Technical Program Manager, AzRISE, University of Arizona, Arizona Research Institute for Solar Energy, 2009-present

### Licenses/Registration:
Currently pursuing licensure in Pennsylvania

### Selected Publications and Recent Research:
SEED[pod] Demonstration Site - led the reassembly of and continued research on the 2009 UA Solar Decathlon House. AzRISE, Arizona Research Institute for Solar Energy, 2009
Solar powered 50kW Compressed Air Energy Storage Demonstration Site Facilitate and administer the design of 50 kW compressed air energy storage system, Arizona Research Institute for Solar Energy (ARISE), University of Arizona, 2010
Arizona Department of Housing, Low-Income Housing Tax Credit Program – “Green/Healthy Points” Criteria, establish metrics to evaluate sustainable building criteria for low-income housing programs, ARISE, 2010
University of Arizona Land Assessment Task Force, lead an effort to evaluate the potential of land for the placement of renewable energy resources, ARISE, 2010
Active Modular Phytoremediation System(AMPS) Prototype, CASE | RPI**,** Oversee the fabrication of a full scale prototype for a plant based wall system that improves interior air quality and reduces energy consumption in buildings, 2010-present
Active/Passive Building Enclosure (HPMS, SEWR): Passive Thermal Exchange Systems, CASE | RPI, Researcher and prototyper for High Performance Masonry System (HPMS) and Solar Enclosure for Water Reuse (SEWR) systems, 2010-Present
Integrated Concentrating (IC) Solar Façade System, CASE | RPI**,** Development and testing of prototypes for a hybrid solar concentrating/daylighting façade system, 2010-Present

# Faculty Resume

## Craig S. Griffen, RA, LEED AP

### Courses Taught (FL 2012 – SP 2015)

ARCH-213 Design 3
ARCH-214 Design 4
ARCH-212 Tech 2; Sustainable Systems

### Educational Credentials:

B. Environmental Design, Miami University, 1984
M. Arch, Washington University, 1986

### Teaching Experience:

Assistant Professor, Philadelphia University, 1995-2002
Associate Professor, Philadelphia University, 2002-present
Assistant Dean for Graduate Programs, Philadelphia University, 2009-2011
Associate Dean, Philadelphia University, 2010-2013

### Professional Experience:

Job Captain, Nagle, Hartray & Associates, Chicago, IL 1986-1989
Project Architect, Perkins + Will, Chicago, IL 1990-1991
Project Manager, Paul Froncek Architects, Chicago, IL 1991-1994
Project Architect, Richard Conway Meyer Architect, Philadelphia, PA 1995-1998
Architectural Design Consultant, Craig Griffen Architect, Elkins Park, PA 1998-present

**Licenses/Registration:**

LEED Accredited Professional, 2009; BD+C Specialty 2013
Licensed Architect - State of Illinois, 1988; Commonwealth of Pennsylvania, 1997

### Selected Publications and Recent Research:

"Icon Busting: Freeing Students from Architectural Stereotypes", Proceedings of the ACSA International Conference 2005 Mexico City, June 2005

"Teaching Construction Details with Color", Proceedings of the Building Technology Educators Symposium, University of Maryland, August 2006

"The Ethics of Exploiting Sustainability as a Vehicle for a Return to Quality Construction" Proceedings of the ACSA Annual Meeting, Salt Lake City, Utah, March 2006

"Flying Carpets; The Floating Roofs of Renzo Piano Building Workshop" *Proceedings of the 2008 ACSA Annual Meeting*, Houston, Texas March 2008

"BIM as an Instructional Bridge Between Design and Technology" *Proceedings of the Building Technology Educators Society Meeting*, University of New Mexico, August 2009

"Converting the Heathen; Teaching Green Building Project Delivery to Construction Management Students" Proceedings of the BTES Meeting, Ryerson University, Toronto, August 2011

"Stealing from Ourselves; Derivations of the Gable Roof in Contemporary Architectural Design", Proceedings of the ACSA Annual Meeting, Miami, April 2014

"Multiple Benefits of Teaching Second-Year Design with Cargo Containers", National Conference for the Beginning Design Student, IIT, Chicago, April 2014

Third Hemispheric Meeting of Architecture Deans, Invited Key Panelist for topic of Distance Education, Antigua Guatemala, October 2014

"Questioning the Role of Online Education in the Architectural Design Studio" ARCC 21015 Future of Education Conference, Chicago, April 2015

### Professional Memberships:

Building Technology Educators Society, 2006-present

# Faculty Resume

## Christopher J.E. Harnish

### Courses Taught (FL 2009 – SP 2011)

ARCHDSN-210 Technology 1: Materials & Methods
ARCH-212 Technology 2: Passive Systems & Building Enclosures
ARCH-314 Technology 4: Advanced Building Analysis
ARCH-302 Design 6 for Architecture
ARCH-306 Study Abroad South Africa
ARCH-507 Design 9 for Architecture
ARCH-508 Design 10 for Architecture

### Educational Credentials:

B.A. in Environmental Studies and English Literature, Denison University, 1994
Denmark International Studies Program, 2001
M. Arch, University of Oregon, 2002

### Teaching Experience:

Assistant Instructor, Africa University, 1999
Graduate Teaching Fellow, University of Oregon, 2000-2002
Assistant Professor, Philadelphia University, 2009-present

### Professional Experience:

Consultant & Project Analyst, Center for Resourceful Building Technology, Missoula, MT, 1995-1996
Yard Manager & Systems Analyst, Resource Woodworks, Tacoma, WA, 1997-1998
Intern Architect, Wyant Architecture, Philadelphia, PA, 2003
Project Designer & Construction Administration Manager, Deborah Berke & Partners Architects, New York, NY, 2004-2007
Design Fellow: Architecture for Humanity, Dennilton, South Africa, 2007-2008
Project Lead, Youth with a Vision Children's Village, Dennilton, South Africa, 2008-10
Project Lead, Peit Patsa Community Arts Centre, Viljoenskroon, South Africa, 2011

### Licenses/Registration:

ARE's in progress
USGBC LEED-GA

### Selected Publications and Recent Research:

2015 *Journal of Architectural Education.* Reframing the Cultural Institution in an Urban South African Township. Online edition.
2013 Social, Environmental and Economic Design Awards. *Honorable Mention.* Piet Patsa Community Arts Centre, Viljoenskroon, South Africa.
2012 Architectural Research Centers Consortium "Methods for Developing Flexible Technical Knowledge in Architectural Education"
2010 IASTE *International Association for the Study of Traditional Environments* "Utopian Compounds in a Dystopic Community: The built pursuit of utopia in Dennilton South Africa"
2007-2008 Architectural Record: In The Trenches *Architectural Blog* Writing on design, construction and experiences in South Africa. http://archrecord.construction.com/community/blogs/AFHBlog.asp

### Professional Memberships:

Association of Collegiate Schools of Architecture – Member and 2010 Conference Attendee
Building Technology Educators Society – Member
IASTE, International Association for the Study of Traditional Environments – Member
Society of Building Science Educators – Committee Member: Scholarships and Award Committee

# Faculty Resume

## David Kratzer AIA, NCARB, LEED GA

### Courses Taught (FL 2012-Spring 2015)
ARCH-312 Design 6: Tectonic Studio (Coordinator)
ARCH-313 Technology 3: Dynamic Environmental Systems
ARCH-314 Technology 4: Advanced Building Analysis
ARCH-401 Design 7: Design-Build Studio
ARCH-416 Housing & Construction Technology Elective Course
ARCH-502 Design 10: for Architecture

### Educational Credentials:
B. Arch, University of North Carolina-Charlotte, 1978-1983
Foreign Study Program, Danmarks Internationale Studenterkomite, 1980-1981
M. Arch, University of Pennsylvania, 1990-1991

### Teaching Experience:
Adjunct Assistant Professor, Temple University, 1991-1992
Visiting Assistant Professor, University of Idaho, 1992-1995
Visiting Assistant Professor, Washington State University, 1995
Assistant Professor, Philadelphia University, 1996-1998
Acting Director, Interior Design Program, Philadelphia University, 1996-1997
Assistant Professor, Dean's Appointment, Temple University, 1998-1999
Adjunct Faculty Professor, Philadelphia University, 2003-2006
Adjunct Associate Professor, Drexel University, 2008
Visiting Associate Professor, Philadelphia University, 2009-2011
Associate Professor, Philadelphia University, 2011-present

### Professional Experience:
Intern Architect/Job Captain, Dalton Morgan Shook & Partners, Charlotte, NC 1983-1985
Architect, Odell Associates, Charlotte, NC 1985-1987
Associate/Designer/Project Manager, Morgan Adams Group, Charlotte, NC 1987-1990
Associate, Agoos/Lovera Architects, Philadelphia, PA 1999-2003
Architect & Consultant, Spearman Associates, Glenside, PA 2003-2005
Principal, BAU Architecture, Elkins Park, PA 1995-1999, 2005-present

### Licenses/Registration:
Registered architect, NCARB, Pennsylvania, Idaho, and North Carolina, 1993-present

### Selected Publications and Recent Research:
"The Practical as Instrument for Technological Imagination" *Journal of Architectural Education* (Cambridge: MIT Press. September 1997)
"Auto-tuning daylight with LEDs: sustainable lighting for health and wellbeing." BPR Paper 2013 ARCC/ EAAE Conference. (Charlotte, NC. 2013) Co-Authored w/ P.I. Eugenia Ellis (PI), Drexel Univ.
"Consensus Building & The Design-Build Project." BPR Paper. 2014 ACSA Fall Regional Meeting & Conference. (Nova Scotia, CN. 2014)
"Design-Build: Personal Privacy for the Homeless." BPR Paper. 102nd ACSA Annual Meeting & Conference. (Miami, FL. 2014)
"Earthship as Model for an Urban Co-op Health Clinic? – Patch Adams & Philadelphia" BPR Paper. 2014 ARCC/ EAAE International Conference. (Honolulu, Hawaii. 2014)

### Professional Memberships:
American Institute of Architects

# Faculty Resume

## Kihong Ku, DDes, MDesS, Reg. Arch. Engineer (Korea)

### Courses Taught (FL 2011 – SP 2015)
ARCH 408 Visualization II: Technical Documentation
ARCH 416 Technology 5: Documentation & Detailing
ARCH 507 Design 9 for Architecture
ARCH 508 Design 10 for Architecture

### Educational Credentials:
B.S. Eng. (Architecture), Seoul National University, Korea, 1992
M.S. Eng. (Architecture), Seoul National University, Korea, 1994
Master in Design Studies, Harvard University Graduate School of Design, 2002
Doctor of Design, Design Technology & Management, Harvard Graduate School of Design, 2005

### Teaching Experience:
Graduate Teaching Assistant, Graduate School of Design, Harvard University, 2001-2002
Graduate Research Assistant, Center for Design Informatics, Harvard University, 2002-2004
Teaching Fellow, Graduate School of Design, Harvard University, 2003-2004
Assistant Professor, Virginia Polytechnic Institute & State University, 2005-2011
Assistant Professor, Philadelphia University, 2011-present

### Professional Experience:
Architectural Engineer & Designer, Hyundai Engineering & Construction, Co., Ltd., Korea, 1994-2000
Design Manager, HanmiParsons, Co., Ltd., Korea, 2000-2001

### Licenses/Registration:
Registered Architectural Engineer (1st Grade), Korea, 1993 (Certificate No. 93204010839G)

### Selected Publications and Recent Research/Practice:
Ku, K., Frosten, S., and Grinham, J. (2014), An Open-Source Paradigm in the Responsive Architecture Studio, ACSA International Conference, June 21-23, 2014, Seoul, Korea (forthcoming)
Ku, K. (2014), Design risk management practices and assessment tools for safety in construction: Opportunities for BIM, CIB W099, June 2-3, 2014, Lund, Sweden
Ku, K. (2013). Comparing safety in design approaches and tools in the US, UK, and Australia, CIB World Building Congress 2013, May 5-9, 2013, Brisbane, Australia
Ku, K., Broadstone, P., and Colonna, A. (2012). Towards On-Site Fabrication: A Case Study on Multi-Trade Prefabrication, Offsite Theory and Practice of Architectural Production, 2012 ACSA Fall Conference, September 27-29, 2012, Philadelphia, PA
Towards Digital Containerized Factories of Composite Architectural Panels for Complex-shaped Buildings, $36,820, PI, MAG Composites Center, Philadelphia University, 6/13-5/15
Integrative design method of environmentally responsive building skins, $6,000, PI, Faculty Research, Scholarship and Practice-based Project Grant, Philadelphia University, 6/13-6/14
Incorporating open source knowledge communities into the research skillset of the design student as evidenced through Prototyping of Interactive Architecture, Nexus Learning Grant, Philadelphia University, $6,000, co-PI (with Susan Frosten), 8/12-7/13
A learning symbiosis of integrative design practices: The DEC Center Case Study, Nexus Learning Grant, Philadelphia University, $2,000, PI, 6/12-12/12

### Professional Memberships:
CIB's Working Commission on Architectural Management, W096, 2007 – present
Korea Construction Engineers Association, 1995-Present

# Faculty Resume

## Armando Plata, AIA, NCARB, PE

### Courses Taught (FL 2009 – SP 2011):

ARCH-303 Structures 1
ARCH-304 Structures 2
ARCH-413 Experimental Structures
ADFND 101 Design 1
ARCH-412 Design 8 for Architecture
ARCH 507 Design 9 for Architecture
ARCH-502 Design 10 for Architecture
ARCHDSN-493 Architecture Internship I

### Educational Credentials:

B.S. Architectural Engineering, California Polytechnic State University, 1985 Graduate Studies in Architecture, University of California - San Diego, 1992-93 M. Arch, University of California - Los Angeles, 1996

### Teaching Experience:

Adjunct Faculty, Instituto Tecnologico de Estudios Superiores de Monterrey, Mexico, 1996 Adjunct Faculty, Woodbury University, 1998-2002 Adjunct Faculty, Wentworth Institute of Technology, 2006-07; Assistant Professor, Wentworth, 2007-09 Adjunct Faculty, Boston Architecture Center, 2006-09 Associate Professor, Philadelphia University, 2009-present Professional Experience: Structural Designer, Integrated Structural Design. San Diego. CA, 1985-1988 Structural Engineer Associate, Building Inspection Department. San Diego. CA, 1988-1992 Principal Architect and Structural Engineer, Tekhne Studio, Mexico and San Diego, CA, 1993-2003 Principal Architect and Structural Engineer, One design Office, Philadelphia, PA 2004-present Project Structural Engineer, Le Messurier Consultants. Cambridge. MA, 2005-2006

### Licenses/Registration:

Registered Architect – Massachusetts National Council of Architectural Registration Board Certification
Registered Professional Engineer – California National Council of Examiners for Engineer and Surveying, NCEES Certification Leadership in Energy and Environmental Design, LEED Accredited Professional

### Selected Publications and Recent Research:

Ann Jarmusch, “Taking Concept of Home to New Level,” The San Diego Union, Aug. 1994
Pablo Bransburg, CASAS Internacional, 08/1996: “Rubalcaba- Klink House” , San Diego CA, pp. 6-9; “Casa Las Gradas”, Mexico, pp. 10-13; “Herbst House”, Albuquerque NM, pp. 22-27
“Tendencias de Fin de Siglo” presentation, Conference at Instituto Tecnologico de Tijuana. Mexico. 1998.
“Project SUM- Sculpture Under McGrath” Lia’s Quilt, Somerville MA, Design Competition, 2007
“99K house” Houston, TX, Design Competition, 2008
Design and construction management of single-family residence, Medford, MA, completed 2015
Structural engineer consultant for artist Marcos Ramirez ERRE in the design and construction of a single-family residence, ongoing, Mexico

### Professional Memberships:

American Institute of Architects
International Association for Shell & Spatial Structures
United States Green Building Council
Building Technology Educators Society
Structural Engineers Association of New York
Delaware Valley Association of Structural Engineers

# Faculty Resume

## Evan S. Pruitt

### Courses Taught (FA 2014 - SP 2015)
ARCH 311: Design 5 for Architecture / The Urban Research Studio
ARCH 214: Design 4 for Architecture / Architecture Foundation Studies

### Educational Credentials:
BSAD, Massachusetts Institute of Technology, 2005
M.Arch., University of California, Berkeley, 2009

### Teaching Experience
Graduate Student Instructor, University of California Berkeley, 2006-2008
Lecturer, California College of the Arts, 2011
Lecturer, University of California Berkeley, 2012
Adjunct Faculty, San Jose State University, 2012-2013
Adjunct Faculty, Philadelphia University, 2014-present

### Professional Experience
Iwamoto Scott Architecture (ISAR), San Francisco, CA, 2006
Fernau + Hartman, Berkeley CA, 2007
eP/studio, Philadelphia, PA, 2010-present

### Licenses/Registration
Currently pursuing licensure in Pennsylvania

### Selected Publications and Recent Research
*Casa Coya*, selected to participate in the Chilean Pavilion at la Beinnale di Venezia 2010, Venice, Itlay
*Casa Coya*, selected to participate in the 2010 Bienal de Arquitectura: 8.8 Re-Construccion, Santiago, Chile
*Opportunistic Quarantine in a Pandemic City,* Plenary Thesis Presentation, UCBerkeley 2008

# Faculty Resume

## Jason Smith, RA, LEED AP

### Courses Taught (FL 2008 – SP 2014)
ARCH 505 Professional Management I
ARCH 506 Professional Management II
ARCH 503 Professional Management (replaced ARCH 505/503)

### Educational Credentials:
B. Arch, Pennsylvania State University, 1994

### Teaching Experience:
Lecturer, Philadelphia University, Fall 2008-present

### Professional Experience:
Senior Associate (since 2008), Kieran Timberlake, 1995-present

### Licenses/Registration:
Registered Architect – Pennsylvania

### Selected Publications and Recent Research/Practice:
Houghton Memorial Chapel and Multifaith Center, Wellesley College (associate-in-charge)
Student Residential Initiative, Johns Hopkins University
Car Shops at the B&O Railroad Museum
Atwater Commons at Middlebury College (project manager)
Bennett Family Center at The Pennsylvania State University (project manager)
Lower School Science Laboratories, Wilmington Friends School (project manager)
Brockman Hall for Physics, Rice University in Houston, TX
Quaker Meeting and Arts Center, Sidwell Friends School, Washington, DC
Several off-site fabricated housing initiatives with the Santa Monica, CA developer LivingHomes

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