Clemson University
School of Architecture

Architecture Program Report for 2017 NAAB Visit for Continuing Accreditation

Master of Architecture, M.Arch I
(nonpreprofessional degree + 90 semester credits)

Master of Architecture, M.Arch II
(preprofessional degree + 60 semester credits)

Master of Architecture + Health, M.Arch I
(nonpreprofessional degree + 91 semester credits)

Master of Architecture + Health, M.Arch II
(preprofessional degree + 61 semester credits)

Year of the Previous Visit: 2011

Current Term of Accreditation: 6 year term

Submitted to: The National Architectural Accrediting Board

Date: 7 September 2016

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Section 1. Program Description

I.1.1 History and Mission

Institutional History: Clemson is a land grant and state assisted University set in the northwest corner of South Carolina. The main campus is on the site of the Fort Hill plantation that was willed to the State by Thomas Green Clemson, agriculturist, ambassador, and son-in-law of the noted Southern senator and statesman, John C. Calhoun. Clemson College formally opened in July 1893 with an enrollment of 446. In the beginning, the college was an all-male military school. It remained this way until 1955 when the change was made to "civilian" status for students, and Clemson became a coeducational institution. In 1964, the college was renamed Clemson University as the state Legislature formally recognized the school's expanded academic offerings and research pursuits.

Institutional Founding Principles: Clemson University first opened its doors in 1889 with a very clear vision: "My purpose is to establish an agricultural college which will afford useful information to the farmers and mechanics, therefore it should afford thorough instruction in agriculture and the natural sciences connected therewith — it should combine, if practicable, physical and intellectual education, and should be a high seminary of learning in which the graduate of the common schools can commence, pursue and finish the course of studies terminating in thorough theoretic and practical instruction in those sciences and arts which bear directly upon agriculture." *Taken from the will of Thomas Green Clemson*

Institutional Mission: The mission of Clemson University is to fulfill the covenant between its founder and the people of South Carolina to establish a "high seminary of learning" through its historical land-grant responsibilities of teaching, research and extended public service. The university has just completed its "ClemsonForward University Strategic Plan", which updates its vision and goals as follows, https://www.clemson.edu/forward/documents/ClemsonForward-Plan.pdf.

Vision Statement: Clemson will be one of the nation's top-20 public universities, nationally recognized as a leader in:

- Research: Innovative scholarship and creativity grounded in basic research, the land-grant mission and unique public/private partnerships.
- Engagement: Enhanced undergraduate learning through evidence-based academic and global engagement and an unmatched student life experience.
- Academic Core: High-quality graduate and undergraduate academic programming, infrastructure and support systems.
- Living: Inclusive, supportive and diverse learning and working environments that attract and retain the very best students, faculty and staff to further enhance the University's strong sense of family and community.

Institution in the Context of 21st Century Higher Education: One of the country's most selective public research universities, Clemson University serves a driven and highly accomplished student body. The ultimate vision of Clemson's 2020 Road Map was achieved in October 2014 when U.S. News & World Report ranked Clemson a Top 20 Public University. Clemson is a science- and engineering-oriented college dedicated to teaching, research and service, and committed both to world-class research and a high quality of life. 92 percent of Clemson seniors say they'd pick Clemson again if they had it to do over.

Clemson's retention and graduation rates rank among the highest in the country for public universities. The university has been named among the best values by Kiplinger magazine, and in student return on investment by SmartMoney. The campus sits on 1,400 acres in the foothills of the Blue Ridge Mountains, along the shores of Hartwell Lake. The university population of over 17,000 undergraduate students and over 4,500 graduate students is enrolled in 80+ majors, 75+ minors, and 110+ graduate degree programs. With the beginning of FY 2017 on July 1, 2016, the university welcomed a new college organization, shifting from 5 colleges to 7 colleges to build an optimal path for academic units to achieve national prominence, and to best support the university's new designation as a Tier 1 Research University in the Carnegie Classification for Institutions of Higher Learning.

The university has education and research facilities and economic development hubs throughout the state of South Carolina — in Greenville, Greenwood, Columbia and Charleston – and abroad. The research, outreach and entrepreneurial projects led by our faculty and students are driving economic development and improving quality of life in South Carolina and beyond. A recent study determined that Clemson has an annual $1.83 billion economic impact on the state. Experiential learning is a valued component of the Clemson experience. In all areas, the goal is to develop students' communication and critical-thinking skills, ethical judgment, global awareness, and scientific and technological knowledge. The distinctive character of Clemson is reflected in the culture of collegiality and collaboration among faculty, students, staff, the administration, and the university board.

Architecture Program History

The School of Architecture celebrated its centenntial, "Southern Roots + Global Reach", in 2013, with a number of events, exhibits, and publications. Architectural education was established at Clemson within the Department of Engineering in 1913 and continued as a small program until the mid-1950s. In 1958 the school achieved independent status with Harlan E. McClure as its first dean. Rapid change ensued with the expansion of the architecture degree program to five years, the construction of a new building, and the organization of the CAF, Clemson Architectural Foundation, for outside professional support.

Visual arts complemented the architecture program from the outset and programs in construction and planning were added in 1963 and 1967 respectively. In the mid 1960s, the five-year Bachelor of Architecture gave way to a four-plus-two Master of Architecture professional degree. In the early 1970s, the school was departmentalized and awarded College status. At that time the predecessors of the current School of Architecture and departments of Art, Construction Science and Management, Planning/Development + Preservation, and Landscape Architecture were created.

In 1995, the university restructured. The College of Architecture was merged with the College of Liberal Arts and the new College of Architecture, Arts and Humanities was formed. The new unit was further subdivided into three schools that grouped related programs from the two original colleges. The three schools, (which do not have administrative positions associate with them), include the School of the Arts, the School of Design and Building, and the School of the Humanities. The School of Design and Building includes the School of Architecture, the Department of Planning, Development and Preservation, the Department of Landscape Architecture, and the Department of Construction Science and Management.

Given Clemson's location in a remote and rural part of South Carolina and the regional profile of the student body, off-campus study opportunities for students have been a long-time priority for architecture. The Daniel Center for Urban Studies in Genoa, Italy was established in 1973 as the first off-campus program in architecture. The Charleston Architecture Program was initiated in 1987 as a similar urban-based program in conjunction with the College of Charleston. The Barcelona Architecture Program was established in 2000 to serve the increasing numbers of students wishing to study off-campus.

The school also has a history of developing specialized degree programs connected to research and to addressing the critical issues of our times. The Architecture + Health concentration, within the framework of the Master of Architecture degree, was initiated in 1968 as the "Health Facilities Planning and Design Studio". It continues to be the most structured and established program of its type in the U.S. In 2013 the school created two new certificate programs for M.Arch students. Through the certificate in Architecture + CommunityBUILD (A+CB) students learn how architecture can be a catalyst for positive change. The Digital Ecologies certificate program focuses on cultivating design research and design practices that are responsive to and augment an increasingly digital society.

Architecture Program Founding Principles

Since its first year of instruction in 1913, architectural education at Clemson has been mindful of its geographies – its connections and relationships to both the state of South Carolina and the wider world. As part of a land grant University, the school takes seriously its responsibility to prepare young men and women to take on responsible roles within the practicing profession. As the sole architecture program in South Carolina, the School of Architecture at Clemson University provides the educational setting that

has nurtured a great number of the state's practitioners, and it continues in this role today. However, the school has always had the further purpose of expanding the body of knowledge of both the practice and discipline of architecture. Consequently, the school has built a program of study with an attentive view to its regional context while seeking perspectives of national and global dimensions.

Architecture Program Mission, *(See Section 4 for the full strategic plan)*
2020Forward Vision: Clemson University's School of Architecture will be a premier producer of transformational architectural leadership, shaping the environment of the 21st century for a better future.

Mission: Clemson's School of Architecture is an interconnected, geographically distributed community of teachers and learners, dedicated to:

- **R**esearch: Generating knowledge to address the great challenges of the time, like health care, ecology, and an increasingly digital society, through innovative, interdisciplinary research, practice and scholarship;
- **E**ngagement: Advocating for the improvement of built, natural and social environments, through design activism, public service and public education;
- **A**cademic Core: Educating future architects, through rigorous and expansive design education, with local and global understandings of firmness, commodity and delight;
- **L**iving: To meet the demands of strategic priorities and to support high-quality university, college and school programs and intiatives, the School of Architecture will acquire adequate resources.

Architecture Program in the Context of 21st Century Architectural Education
Today a geographically diverse faculty and student body study architecture in great works of architecture, including the new and award-winning Lee III, on four fluidly connected campuses. As its faculty, students and buildings have in the past, Clemson's School of Architecture draws in and reaches out to distant horizons from Southern roots. We like and promote big, beautiful, innovative, theoretical ideas, but have an equally strong proclivity for making and doing, for getting our hands dirty, for actively engaging with real people and places, and with the critical issues of our time. The values that define and guide the school in this time, are:

- Excellence: Supporting and celebrating a culture of high expectations in all processes and products, rewarding innovation, creativity, critical thinking, craft & making, and intellectual curiosity.
- Inclusivity: Actively seeking and sustaining the participation of people in the school with different places of origin, points of view, and ways of knowing.
- Collegiality: Cooperatively working independently and collectively, encouraging individual achievement, collaboration, open discourse and shared decision-making.
- Accountability: Taking responsibility for the consequences of our actions on each other, our many constituents, the planet and the future.
- Legacy: Designing the future upon an understanding and respect for the past, our unique heritage of peoples and places.
- Connectivity: Enjoying and optimizing the contributions of all constituents and locations, from students to alumni, faculty to industry partners, Clemson to Genoa and all points in between.

Architecture Program's Benefit to the University, and vice versa
Schools of Architecture and their universities need to mine the potential of the relationship between design and science, theory and application, intuition and evidence to deal innovatively with the wicked problems of 21st century issues. Architecture faculty have the capability to add value to the economic development initiatives and research efforts across the university, and the proof of these benefits is growing in both this School of Architecture and Clemson University.

The university has identified 6 key focus areas in its 2020Forward plan as follows: Big Data Science, Health Innovation, Sustainable Environment, Human Resilience, Complex Engineered Systems, and Advanced Materials, with a clear goal to elevate scholarly impact and reputation through these topics. Architecture leads or participates in a number of these focus areas, through Centers, Institutes and initiatives, including:

- The Center for Health Facilities Design + Testing, led by Spartanburg Regional Health System Endowed Chair in Architecture + Health Design, and Associate Professor of Architecture, Dr. Anjali Joseph, helps lead the focus on Health Innovation. The CHFD+T is the recipient of numerous grants, most notably a $4 million dollar/4-year research P-30 grant from the NIH Agency for Healthcare Research and Quality. This grant and the other work of the center is collaborative, multi-disiplinary, multi-institutional, and focusing on problems with local and global impact.
- Clemson's Wood Utilization and Design Institute (WU+D), led by director Dr. Pat Layton, Professor of Forestry, is "a multidisciplinary engine of innovation where foresters, architects, engineers, constructors and building industry stakeholders coalesce to design advancements in wood-based construction materials." Architecture faculty members Albright, Harding and Blouin are key team members of this institute, engaged as co-PI's on grants, and leading the development of new wood construction systems, working toward a more sustainable environment.
- The Community Research + Design Center (CR+DC), led by its director and Associate Professor Dan Harding, leads the university in service-learning projects focused on community-based public interest design. The principle foci of CR+DC projects are healthy communities and a sustainable built environment. The center coordinates public interest design-based service learning projects, provides the core for the Architecture + CommunityBUILD graduate certificate program, and serves as an applied research laboratory for students and faculty.
- The CR+DC and WU+D were the driving forces behind Clemson's 2015 entry into the Department of Energy's Solar Decathlon, and provided one of the most powerful examples of how the architecture program is a leader for the university in advancing a sustainable environment and materials research.
- The Clemson University Institute for Intelligent Materials, Systems and Environments (CU-iMSE) focuses its efforts on the design and evaluation of interactive and intelligent built environments. Partnering Architecture, Electrical & Computing Engineering, and Materials Science & Engineering, CU-iMSE is home to human-centered, transdisciplinary research and teaching. Until July 2016, the institute was co-directed by Professor of Architecture Keith Green, PhD, who has been the PI of a number of NSF and other sponsored projects.

A few additional activities/initiatives that demonstrate the School of Architecture's benefit to the university through discovery, teaching, engagement and service include the following.

- A university goal is to invest in high impact academic & global engagement in undergraduate education. Architecture is a leader in global engagement through its Fluid Campus, and a leader in high impact undergraduate programs through its emphasis on engaged, service-learning for its student majors, and the summer offering to other majors of a Minor in Architecture, in Genoa.
- A university goal is to build nationally competitive graduate programs. Architecture's M.Arch, ranked in the *Design Intelligence* top 20 graduate programs in 8 of the previous 10 years (and as a top 10 among public university programs), is currently 1 of only 2 top-20 graduate programs in the university. Architecture's areas of concentration and certificates within the accredited program create nationally competitive programs that are connected to faculty research and the university's focus areas.
- A university goal is to grow research focus areas and industry partnerships. The school of Architecture has had 4 years of support from the Precast Industry Foundation for educational programming, i.e., focused design studios and seminars.
- The scholarship, research and practice engaged in by the School's faculty is exemplary, central to the university's areas of emphasis, and to the advancement of the discipline. *(See Section 4.)*

The benefits derived to the School of Architecture from the setting of Clemson University include:

- The university fosters and supports a culture that values engagement and collaboration (across disciplines and institutions), and innovation and application, characteristics through which architectural education and research thrive.
- The university attracts articulate, engaged, high-achieving, generally happy and curious students, who mostly relish the Clemson experience.
- Since the last accreditation visit, the university has provided the architecture program with excellent new and/or renovated facilities in Clemson and Charleston.

- The school receives remarkable fiscal, intellectual and programmatic support from its alumni network, the Clemson Architectural Foundation (CAF), and the Clemson University Foundation (CUF).
- The university has established practices and centers of cross-disciplinary research and inquiry that benefit architecture's students and faculty, from Creative Inquiry courses at the undergraduate level to the Clemson University School of Health Research (CUSHR) at the faculty level.
- The program is known, respected, and supported by the university's leadership, including the president and provost.

Architecture Program and Holistic Development

Clemson architecture students participate in distinctive educational experiences, intended toward the holistic development of young professionals. The curriculum of the pre-professional BA in Architecture is purposefully broad, including a requirement for a minor and for a semester or more of off-campus study. The accredited degree assumes that students who matriculate into the M.Arch. programs have a liberal nonpreprofessional or preprofessional education upon which to build and take ownership of their first professional degree education.

In today's global economy, nothing can replace the experience of graduates who have learned to view the world from a different perspective. Clemson University was one of the first architecture programs in the Country to establish a satellite center for study in Europe, (and was noted as such in Yale's recent celebration of their architecture program's centennial). Since that program was established more than 40 years ago, our program has grown into a Fluid Campus that provides students with unique study opportunities. The Fluid Campus refers to the geographically distributed learning opportunities, the integration of these opportunieis within our degree-earning graduate and undergraduate curricula, and the fluidity of communication and work practices in our increasingly digital and globally interconnected world. Our centennial investigations into our roots, coupled with our creation of new certificate programs linked to and connecting locations, helped us to understand that the Clemson campus is the core of the Fluid Campus, and, the Fluid Campus is more about the "what" than the "where": Our locations afford us unique opportunities, but it is what we do with those locations and across those locations that defines us. "What" we hope to do in the future will also help us define the future "where", as it has in the past.

The Fluid Campus has been enriched by: Offering Fluid Studios in Clemson; Utilizing Clemson/Charleston/Genoa through the Kids in Architecture project; Utilizing Clemson/Charleston/Irvine through our DOE Solar Decathlon 2015 entry, Indigo Pine; Connecting Genoa/Barcelona through studio critic exchanges; Creating the Architecture + CommunityBuild Certificate to utilize both Clemson and Charleston experiences; Initiating a Southern Roots + Global Reach Endowment; Exposing the university's leadership to our unique locations and programs, the "where" and the "what". Engaged practical learning is central to the university and to a number of programs and courses within the school throughout its Fluid Campus.

I.1.2 Learning Culture

Clemson's School of Architecture provides a positive and respectful learning environment that encourages optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff. The school adopted its updated studio culture policy at its August 2016 faculty retreat, after months of collaboration and discussion between students and faculty. The co-joined policies can be summarized as follows:

Learning Culture

Creating and sustaining a rich culture for learning requires that the School also create and sustain a rich culture of teaching. Learning is omni-directional and benefits the entire community. It also requires that the community of learners be granted the space for open and free inquiry that drives an ongoing conversation and critical engagement. It requires the knowledge developed to be communicated within and beyond the School. Most importantly, the learning culture has to find ways to remedy the historically narrow range of viewpoints and ideas that have served as precedents and models. As the discipline itself

quickly expands and the academic and professional worlds incorporate radically broader ranges of insight and perspectives the School's learning culture must be constantly evaluated and expanded.

Studio Culture*, (See Section 4 for the full policy)*
The School's Learning Culture encompasses all of our educational formats and activities but the sequence of architectural design studios serve as catalyzing moments within each program of study, and as such merit special consideration. The need for comprehensive rethinking of the culture of the design studio in architecture programs is well-established and remains of vital importance. The development of the Studio Culture Statement is a thorough reworking of the previous statement and the culmination of a year's work organized by the Faculty and Student Advisory Committee, and involving student organizations, students and faculty.

The values of time management, general health and well-being, work-school-life balance and professional conduct are addressed explicitly in the Statement and are key focus of each studio's opening mini-workshop to discuss and design the studio setting. Instructors, academic advisors, and students will all be enlisted to provide feedback on observations of the community's health and well-being.

Plan for dissemination to all members of the learning community, regular evaluation, and continuous improvement or revision is built into the Learning and Studio Culture Statements. The Learning and Studio Culture Statements will be included in our website, posted in conspicuous locations throughout the School, included with studio information packets, and presented at the opening SoA colloquia. The Faculty and Student Advisory Committee Chair will be responsible for organizing an annual program to solicit feedback from the entire learning community. A working group composed of the committee members will work with individual studios at the beginning of the year to hold small group workshops focused on the studio's aims and objectives. A follow-up assessment will be carried out at year's end by the same working group. Feedback garnered from the year-end assessments will then be incorporated into the respective Learning and Studio Culture Statements as they continuously evolve.

I.1.3 Social Equity

Clemson University adheres to policies of social equity in all aspects of university governance, http://www.clemson.edu/diversity. In the past year Clemson established the Chief Diversity Office, and in February 2016 named Lee Gill as the first Chief Diversity Officer. The CDO will develop and lead efforts to create an environment for learning, teaching, and work that actively supports a more diverse and inclusive community. The vision for the Chief Diversity Office is derived from the University's statement regarding inclusion, which reads as follows: "Clemson University aspires to create a diverse community that welcomes people of different races, cultures, ages, genders, sexual orientation, religions, socioeconomic levels, political perspectives, abilities, opinions, values and experiences. Clemson University will strive to reflect these differences in its decisions, curriculum, programs and actions. The institution will seek to ensure that underrepresented groups have equal access to the education and resource opportunities available at the University. Policy and procedures are carefully scrutinized to sustain an inclusive and productive environment."

The university has had a particular focus on social equity in the 2015/16 year, as both the state of South Carolina and the university have struggled to reconcile their histories with their obligations and aspirations. The state removed the confederate battle flag from the state capitol grounds on July 10th, 2015, following the massacre of the Charleston nine earlier that summer. Here on campus, calls for greater inclusion and equity culminated in a prolonged sit-in at the university's administration building in late spring semester 2016. President James Clements, in his May 6th, 2016 year-end general faculty meeting discussed the importance of diversity and inclusive excellence in the university's newest strategic plan. "I was truly moved by the passion that we all saw for making Clemson a more inclusive place. The (recent) sit-in led to several open forums and many conversations about campus climate, diversity and inclusion. In response to the sit-in, I issued a list of specific actions – with timelines – as we continue to strive to create an environment of inclusive excellence."
Diversity is a central tenet of the mission statement of the College of Architecture, Arts, and Humanities in its new strategic plan: "Through leadership in the arts, design/building and the humanities, we are

creating a diverse, inclusive and resilient community that anticipates and addresses the challenges of evolving local, state, national and global priorities." The college is the leader of the university's "Race and the University" series. The School of Architecture is equally committed to social equity, diversity and inclusion. Inclusivity is one of the six foundational values of the school in support of the achievement of the school's 2020Forward plan: "Inclusivity: Actively seeking and sustaining the participation of people in the school with different places of origin, points of view, and ways of knowing." Balancing gender and racial diversity is a leading concern for faculty selection committees and for student recruitment and enrollment. Establishing a School that more accurately reflects the state's citizenry will continue to elevate the conversation for both students and faculty, increasing the depth, topical concerns and potential for critical thinking.

To create a diverse learning environment the school is committed to forging a curriculum that ensures the participation of all students, promotes cross-disciplinary collaboration and strives to maintain an equity of access to theoretical and practical debate and discussion. We subscribe to the idea that human values are recorded in the context of the city and the landscape. We further believe that we have an obligation to teach values of understanding societal and cultural issues that come to bear upon the circumstances of building. Pedagogical themes are carefully chosen, ones that bridge a student's awareness of current events to physical design of buildings and public spaces that in turn reflect the program in action and respect ideas of inclusion. This ethos is communicated to current and prospective faculty, students, and staff via the school's website, syllabi, studio culture, lecture series, and is reflected in the distribution of the school's human, physical, and financial resources. Institutional, college, and program-level policies are in place to further EEO/AA, and other University, College and Departmental initiatives and goals. The school works closely with the office of Student Disability Services and the office of Access and Equity to ensure that all students, staff and faculty are given equal opportunities.

To increase the diversity of students since the last accreditation visit the school has:

- Worked with the Dean's office and the other departments of the School of Design + Building to develop a video, "Imagine and Create the Future", highlighting the achievements of some of our alumni and students of color, targeted and distributed to middle-schools throughout the SE region.
- Supported the creation of the Architecture + Community BUILD certificate program in graduate studies that has a mission dedicated to social and public interest design.
- Supported the undergraduate Architecture Minor program to promote cross-disciplinary collaboration.
- Initiated the creation of the Student Council for Diverse Design Thinking (D^2T), dedicated to dialogue between diverse groups, organizations, and individuals within the allied design disciplines.
- Supported the creation and programs of a new National Organization of Minority Architecture Students (NOMAS) chapter, and a Women in Architecture Students (WIAS) organization.
- Changed the admissions policies into the undergraduate program to admit more transfer students and "Bridge to Clemson" students.
- Increased the diversity of the invited lecturers for the CAF/Architecture Lecture series.
- Enhanced recruiting efforts to attract non-traditional students, minority students, students beyond the usual geographic catch basin, and to first generation college applicants through direct outreach and early communication with academic advisors.

To increase the diversity of faculty and staff since the last accreditation visit the school has:

- Discussed the need to diversify the School of Architecture community in faculty meetings, forums, and retreats as one of our highest priorities
- Advertised faculty positions broadly and internationally, including on NOMA website
- Been more purposeful in diversifying pools of applicants selected for interviews.

We have serious work ahead but the school's student body has become more diverse in recent years. In 2012, 82% of our undergraduates were white, compared to 74% in 2015, with the greatest gains by African-Americans and Latinos. In the M.Arch program nonresident international students have brought a different and very welcome kind of diversity. 16% of the 2012 M.Arch students were nonresident international students, compared to 27% in 2015.

The school's plan for maintaining or increasing the diversity of its faculty, staff, and students during the next two accreditation cycles includes:

- Achieving a goal of increasing our faculty and student diversity by 15% by 2020.
- Expanding our pre-collegiate summer offerings to Charleston and other locations in the state.
- Continuing to diversify our lecture series and curriculum, support our diverse student organizations, and be mindful in faculty and staff searches.

I.1.4 Defining Perspectives

A. Collaboration and Leadership

Developing leaders is front and center in the school's mission/vision. Students develop the interpersonal skills for fostering team unity, communication and decision-making, conflict resolution, cultural awareness and empathy, and the motivating purposes to effectively achieve commonly held goals through many and multiple opportunities for collaboration and leadership. Many of the design studio projects are team-based projects, through which students learn how to clearly communicate their design ideas to themselves and others, and negotiate toward optimum outcomes. Many of the design studio projects are engaged with service learning and public "clients", providing students with early exposure and preparation to serve clients and the public. Many design studios have research or industry partners, providing opportunities to work across diverse groups, with professional colleagues and various stakeholders.

Within the framework of the accredited and highly structured M. Arch. degree program, Clemson Architecture seeks to offer students as much choice as possible to design their own paths, gaining individual breadth and/or depth. Some students seek to focus their studies in the highly respected Architecture + Health program. Others focus their interests in the Architecture + CommunityBUILD program or Digital Ecologies certificate program. Some spend one or two semesters in Charleston, Barcelona, or Genoa. Others pursue up to 12 credit hours of elective coursework (nearly one semester) outside of architecture. The fluid studios, semesters 4 and 5 of the 6-semester M.Arch I, are elective, on- and off-campus, and often vertical and multi-disciplinary, engaging allied disciplines. This choice and variety helps develop our students as critical thinkers and leaders.

A few specific examples of recent initiatives through which we sought to meet this defining perspective of collaboration and leadership include:

1. ARCH 8920 Spring 2016: The major project in the required "Comprehensive Studio", semester VI for the M.Arch students (not including M.Arch + Health) was a project to design a new Student Center for South Carolina State University, which engaged "clients", students and members of the Board of Trustees, from this historically black land grant institution, and built on the master planning work of a Clemson Landscape Architecture studio from the previous semester.
2. ARCH 8210 Fall 2015: The major project of the required "Research Methods" course, semester IV, was a post-occupancy evaluation of a relatively new building on campus, the Academic Success Center. The research was team-based, and engaged the constituents of the project.
3. Indigo Pine, Clemson's entry to the 2015 Solar Decathlon, has continued into its 3rd year of providing multi-disciplinary, constituent-engaged collaboration and leadership experiences for participating students, through fluid design studios and other courses.
4. In Architecture + Health, a $30,000 2015 NCARB Grant exposed a cohort of M.Arch students to the pressing real-world problem of access to primary health care for medically underserved populations. Students in two linked, required design studios and a programming course developed design proposals in a collaboration with practitioners, healthcare providers and others.
5. We have collaborated with Landscape Architecture and Planning on a new Master of Resilient Urban Design degree proposal (which should receive final approval from the state in the fall of 2016), and are collaborating with Construction Science and Management on the development of an Integrated Project Delivery Certificate program to be piloted in the spring of 2017.

We rely on our student organizations, AIAS, NOMAS, WIAS, GASP (Graduate Architecture Student Partnership), to provide leadership to the student body, and representation to many and varied school

committees, including faculty search committees. The school's fraternal organizations, Alpha Rho Chi and Tau Sigma Delta also provide leadership opportunities. We are especially proud that Joel Pominville, a 2015 BA grad, served as the 2015/16 AIAS national Vice-President. Finally, although it is an elective course, President Emeritus James Barker's course on "The Architecture of Leadership" is a fine example of the priority the school places on the perspective of collaboration and leadership.

B. Design

At Clemson, the M. Arch. program seeks to develop students' proficiency in responding to contemporary architectural, social, and global issues with a balance of theoretical knowledge and practical abilities. As the only school of architecture in the state, Clemson Architecture gravitates toward the middle of the theory-practice spectrum, offering an educational foundation that respects both the theoretical, conceptual, and historical knowledge needed by educated leaders with the skills needed in contemporary architectural practice.

Clemson's School of Architecture is not a "style" school, but it is a design school. Design studio is the center of the curricula, through which students are prepared to engage in design activity as a multi-stage process aimed to address increasingly complex problems, and provide value and an improved future. Each semester, major emphasis is placed on the work of the design studio, where design solutions—architectural, environmental, conceptual, or constructed, as appropriate—are proposed for a broad range of local needs and global issues. Design is learned as an interative and collaborative process, with high expectations within design for research, technical expertise, skillful action and judgment. Precedent research and analysis is a regular activity. The design studio is complemented by coursework in building technology, architectural history and theory, representation and fabrication, research methods, and professional practice topics, and these courses are integrated with studio when possible.

In semesters 1 and 2 of the M.Arch I, all students take the same 4 courses and 15 credits each semester. During this introductory year, Visualization I and II (ARCH 8600 and 8610) are highly integrated with Architecture Studios I and II (ARCH 8410 and 8420). The History/Theory and Structures courses also and obviously inform design studio.

In semester 3, the M.Arch. I and M.Arch II students join together in a highly integrated and team-taught Design Studio III (ARCH 8510) and Production & Assemblies course (ARCH 8720). The Professional Practice I course (ARCH 8810) and Research Methods course (ARCH 8210) are not integrated with the design studio, but provide students with professional context, generative and evaluative strategies, and tools for identifying and framing problems from a complex milieu.

Semesters 4 and 5 are the "fluid" semesters, in which the "ties that bind" are the SPC's of the design studios and other required courses across all locations and certificate programs. In semester 4, Design Studio IV (ARCH 8520) emphasizes pre-design, site design and environmental systems, and is complemented by a "local" modern History/Theory course (ARCH 8620) and the required Environmental Systems course (ARCH 8730). In semester 5, Design Studio V (ARCH 8570) again emphasizes pre-design and site design, in addition to cultural diversity and integrated evaluations and decision-making. All other courses in this semester are elective.

In semester 6, students come back together, bringing what they have learned from their varied experiences, to the highly integrated Comprehensive Design semester. The Comprehensive Studio (ARCH 8920) is a collaborative project, team-taught, and supported by the Building Processes course (ARCH 8740) and the Professional Practice II course (ARCH 8820). History/Theory IV (ARCH 8640) focuses on emerging issues, encouraging students to ask hard questions as they launch into the world.

Within the Architecture + Health (A+H) program the course series is a little different from that described above, but with similar goals and methods, and an at-least equal emphasis on design and rigorous design inquiry. Studio design projects and seminar courses examine architecture-health relationships for settings and conditions ranging from entire communities to specific projects and individual spaces. The emphasis in the studio is on design excellence within the framework of the complex demands found in the

practice of health-care architecture. Student work must stand up critically at all levels of architectural consideration. In addition to required Architecture coursework common to all M.Arch students, the Architecture + Health curriculum also requires a Programming course (ARCH 6880), a History/Theory of Architecture + Health (ARCH 6850), a Health Facilities Planning and Design Seminar (ARCH 8860), a Health Policy, Planning and Administration course (ARCH 8900 – now ARCH 8650), and a Health Internship Course (HLTH 6200) that inform, compliment and supplement a three-studio sequence of A+H-specific design studios that lead to either an A+H Comprehensive Project Studio (ARCH 8920, Section 1) or an A+H Thesis Studio (ARCH 8910) which also involves a comprehensive design project.

The school's accredited degree programs have design at the core, and are designed for students to learn the combinations of methods, skills and cognitive processes that architectural design requires. Clemson students, when they have competed, have excelled in design competitions. *(See a listing in Section 4.)*

C. Professional Opportunity

It is a central goal of this School that its students and graduates understand the multi-faceted roles and responsibilities of the architect as leader, facilitator, and advisor in the profession and in the community. Clemson architecture students are provided with a sound preparation for the transition to internship and licensure within the context of international, national, and state regulatory environments; an understanding of the role of the registration board for the jurisdiction in which it is located; and prior to the earliest point of eligibility, the information needed to enroll in the Intern Development Program.

The School of Architecture has a unique relationship with the South Carolina Board of Architectural Examiners, (SCBAE), and the students benefit from this relationship. The South Carolina Board of Architectural Examiners provides two streams of funding to Architecture: Twenty-five thousand dollars ($25,000) annually to the Gunnin Architectural Library; All the funds needed to pay the students' IDP/AXP enrollment fees. All graduate students and undergraduate seniors get the entire AXP enrollment fee paid. The Director of the School of Architecture has historically been appointed to the state board by the Governor, and the current Director continues this tradition. Another use of the SCBAE Education and Research Funds is sponsoring continuing education workshops. The board has partnered with the Rutland Institute for Ethics to provide workshops in Greenville, Columbia, and Charleston. The CAF has recently partnered with the Rutland Institute to provide Leadership workshops in the same locations.

The School has an active and informed NCARB Licensing Advisor in Associate Professor Rob Silance. He works with the state's licensing board and others to get students registered for AXP and to keep up-to-date of changing standards and expectations. Every fall semester the school hosts an AXP Convocation. The state Board's administrator and often a staff member from NCARB come to Clemson to speak to a general convocation of students in the third and fourth year of the undergraduate program and to all graduate students. The AXP process is explained and students are enrolled in the program. IDP/AXP credit is available to undergraduate and graduate students studying at the Clemson Architecture Center in Charleston (CAC.C) who participate in internships in architecture, landscape architecture and construction practices in the Charleston area. Supervised site visits on the Clemson campus also provide AXP credit to interested students, as do various design/build summer experiences.

The transition from education to licensure will be fully covered in the Integrated Path to Architectural Licensure (IPAL) program that will initiate in the next year in Charleston. As one of the original 13 schools with an NCARB-approved program, the state's practice act was recently revised to allow examination before graduation. *See Section 4 for the IPAL description.*

The school has a richly supportive relationship with the state's professionals and the AIA. Each year the SC AIA chapter contributes funding to support scholarships, and co-sponsors alumni receptions. AIA Charleston co-sponsors the Charleston-based lecture series. Many members of the AIA and the professional community are faculty and/or regular participants in design reviews throughout the year. The AIA sometimes appoints a liaison to attend the School's faculty meetings and receive all internal school communications; and the School appoints a liaison, currently Assistant Professor Dustin Albright, to the

AIASC Board. The involvement of professionals in teaching and studios expands beyond Clemson and Charleston to the Barcelona and Genoa programs, where the majority of faculty are active practitioners.

Architecture Career Expos have been held on campus each year since spring 2011, in collaboration with Landscape Architecture, and with great success. The March 2016 event had 46 firms participating, with another 11 turned away due to lack of space. (*See Section 4)* By maintaining close ties with colleagues and alumni in practice through a variety of structured contacts, we maintain an active awareness of the challenges of practice. Many among the current faculty maintain practices and are AIA members. Several serve or have served on local, state, regional or national committees and boards. Many local professionals come to speak in the professional practice courses, and are also the core trustees of the Clemson Architectural Foundation (CAF) and the Professional Advisory Board. Four of the faculty are FAIA, and the Director is a former AIA national President.

The Architecture + Health students and faculty are involved annually with the AIA Academy of Architecture for Health and American College of Healthcare Architects (ACHA). The entire Architecture + Health program annually attends the national Healthcare Design Conference, (supported by grants and the school), where the students participate in design charrettes, the faculty make multiple presentations, students visit hospitals in the conference area, the students network with leading professionals in this area of practive, and the program hosts an alumni reception. The A+H program received the 2014 NCARB Award for Innovative Architecture Curricula that Integrates Education and Practice that helped support a semester of richly integrated coursework and practitioner engagement in the Spring of 2015.

Clemson M.Arch students gain additional knowledge of the profession's diverse and collaborative roles through their vertical and interdisciplinary experiences during their fluid semesters. Issues of practice are comprehensively covered in the two Professional Practice courses, ARCH 8810 and 8820. Field trips, off-campus study, a new faculty brown-bag lunch-talk series, and the lecture series provide students with exposure to practice defined beyond traditional boundaries. *(For a list of recent lectures, see Section 4.)*

D. Stewardship of the Environment

Clemson's NAAB accredited degree programs produce graduates who are prepared to both understand and take responsibility for stewardship of the environment and natural resources. An ethos of environmental stewardship is expected in every design project, as we teach design practices that seek to minimize negative environmental impact and connect people with the natural environment. This ethos was publicly recognized in November of 2015 by the SC Chapter of the USGBC who honored the school with an Excellence in Sustainability Education Award.

Our recent participation in the 2015 DOE Solar Decathlon with the Indigo Pine project is the most robust example of this commitment. Over 100 students, over 3 years (starting in Fall 2013), participated in the design and/or construction of this 1,000 sf house, and the design of an environmentally-focused framing system, SimPLY. This project is a great representation of the Fluid Campus in operation, as the project started with Creative Inquiry course, and a short design project in the required Design III – ARCH 8510 course in Fall 2013; to go on to utilize 4 locations (Clemson, Charleston, Genoa and Irvine) for design development, testing and construction; and to engage expertise from each of the university's colleges – with Architecture as the leader in all ways. The research and outreach of the project continues: Indigo Pine East (the beta house) is at the SC Botanical Garden, serving as an interactive educational space on issues around sustainability, and soon will become new offices for the university's recycling center. The final status of Indigo Pine West (the competition house) remains uncertain.

Many studio projects have an environmental focus, and have resulted in a number of design competition awards, including an almost clean sweep of awards by Clemson students, with work created in a required design studio, in the 2012 Dow Solar Design to Zero Compeition, which attracted 131 teams from 19 countries. A Clemson student team received 1st place in the 2012-13 Sustainable Lab Competition, sponsored by the ACSA, with their work that was created in another required studio, from among 120 submissions. A Clemson student team was recognized for the South Region Winning Project, 2011-12: The Sustainable Home, a Habitat for Humanity Student Design Competition.

An environmental imperative is part of the impetus for our commitment to the WUD Institute. Wood utilization and design ideas have been the focus of some studios, Creative Inquiry and special topics courses, and faculty/student research. Zero-Energy House research and design has been a long recurring offering. ARCH 8730 – Environmental Systems, develops a student's understanding of climate, geography and other natural characteristics and phenomena. LEED certification of students and faculty is encouraged and financially supported by the Clemson Architectural Foundation (CAF).

Within the Architecture + Health program and research, the importance of a connection to the natural environment in health care environments is a constant conversation, as is the design of healthy communities. The fall 2014 Architecture + Health design studio focused on College Avenue in Clemson, an urban design proposal and design guidelines that dealt with large issues of sustainable, healthy community design. Within the Architecture + CommunityBUILD certificate program, issues of social justice and public interest always and necessarily overlap with issues of environmental stewardship. Advocacy for environmental issues is advanced by the CR+DC through community engagement.

Laws and practices governing architects and the built environment, and the ethos of sustainable practices are introduced in the professional practice courses and the systems and materials courses. The school has the pedagogical luxury of being in an exemplary "building that teaches". Lee III is a zero-energy ready LEED Gold building. The other Fluid Campus locations and buildings contribute to the learning of an environmental paradigm, as students experience various geographies, climates, and the built environment's response to those particulars.

E. Community and Social Responsibility

The school's response to this perspective is related to its responses to the other preceding four perspectives, and many of the examples cited previously support this perspective. Students enrolled in the M.Arch. programs are prepared to be active, engaged citizens; to be responsive to the needs of a changing world; to acquire the knowledge needed to address pressing environmental, social, and economic challenges through design, conservation and responsible professional practice, to understand the ethical implications of their decisions; to reconcile differences between the architect's obligation to his/her client and the public; and to nurture a climate of civic engagement, including a commitment to professional and public service and leadership. Students are challenged on a regular basis with exercises that involve them with a range of social issues and client needs. Every opportunity for engagement in projects of societal concern is used to maximize the students' exposure and understanding of these issues. A few specific typical examples include:

1. Design Studio III, ARCH 8510 Fall 2015: Students engaged in three sequential local projects, in "(RE)thinking Clemson". Three scales of inquiry – landscape, façade and urban space – represented three different territories that need to be restored and improved in Clemson. In Fall 2014, this studio focused on the needs of Greenville's Nicholtown neighborhood, working with a local nonprofit, the studio designed affordable housing prototypes and public spaces.
2. ARCH 8960 – Architecture _ Health Studio – Tectonic Projects: As part of their Outpatient Cancer Center Projects research and design, students visited the Bon Secours St. Francis Health System Millennium Cancer Center, and interviewed the clinicial and management staff.
3. All Architecture + Health studios and students regularly work with healthcare clients and and a cross section of industry partners and constituents. As a part of their NCARB Grant work in the spring of 2015, Architecture + health students and faculty worked on a project for the Foothills Coummunity Health Center, a Federally Qualified Health Center [FQHC] serving medically underserved populations in the upstate of SC. Each class of A+H students takes a studio (ARCH 8970) that explores the larger issues of urban design and the potential for urban hospitals and medical centers to serve as role models for healthy community planning and design.
4. In Barcelona, ARCH 8570, Fall 2015, students explored and investigated the postindustrial spaces that make up a part of the urban tissue of Barcelona and many other urban center, through the design of a "Design Factory-Fabrication Lab". Students participating in fluid-campus programs abroad get the chance to engage in projects of community and social interest, often in very diverse contexts such as working with historic district challenges in Genoa, and brownfield sites in Barcelona.

5. Architecture + CommunityBUILD (A+CB) projects in design studios and the Community 1:1 seminar provide students with an opportunity to work collaboratively with communities to design and construct solutions to real needs within the community. Recent projects in Clemson and Charleston have included a Crop Stop farm-to-school program, a "Vat Shack" for a local non-profit, trail-planning with the Green Crescent nonprofit in Clemson, and the design and construction of 7 bridges and other improvements for the SC Botanical Garden.
6. Other Clemson-based Fluid Studios have included the SlumStudio (ARCH 8520 Spring 2015) in which the goal was to research and understand slums aroung the world; the Situationist Archeology studio (ARCH 8520 Spring 2015) that investigated retrofitting three post-industrial abandoned buildings within the urban core of Philadelphia; and the New Canaan Library studio (ARCH 8520 Spring 2016) that engaged the librarians in the process and resulted in an exhibit of the student's work in the existing library.
7. Other Charleston (CAC.C) projects provide additional opportunities for community engagement, ranging from designing proposals for renovating the Y, to repurposing an existing warehouse to urban design proposals to reconstitute two formerly separated low-income African-American neighborhoods. The CAC.C's Architect2Architect Seminar series engages students in practitioners in conversations about architecture and community.
8. Creative Inquiry and Special Topics courses provide additional venues for client engagement, engaged learning and responding to societal needs. An example is the Site-Specific Messaging Creative Inquiry led by Assistant Professor Sallie Hambright-Belue in which students are working with a new food hub nonprofit in Greenville and a convenience store chain to design culturally appropriate community gardens and spaces in food deserts across Greenville.

I.1.5 Long Range Planning

Long range planning in the School of Architecture is directly linked with strategic planning processes, objectives and schedules at the university and college levels. The university's most recent strategic planning process, 2020Forward, began in the fall of 2014, after the arrival of a new university president and provost. University-wide committees were established, (with Architecture faculty participating), and a new college reorganization was a significant result. See http://blogs.clemson.edu/2020forward/. The previous strategic plan, Clemson's 2020 Road Map, was created under the leadership of then president Jim Barker, FAIA, (now a Professor of Architecture), and provided a clear roadmap for the lean years of budget reallocations during FY12-FY15. The 2020 plan had largely achieved its vision when the university was ranked as one of the nation's top-20 public universities by U.S. News and World Report.

Strategic planning at the College of Architecture, Arts and Humanities began soon after, with work in earnest during the spring and summer of 2016. Director Schwennsen represented the School of Design and Building on the AAH strategic planning task force assembled by the dean to start the collegiate process. After this group created and circulated the first draft of objectives, the leadership of the 3 "virtual" schools of the college met to draft their objectives. These 3 plans were then overlaid and blended to become the "College of AAH 5-year Strategic Plan for 2016-2021", finalized by the deans, directors, chairs and communications staff during their twice-monthly meetings, and presented in draft form to the university's Board of Trustees in July 2016. *(Included in Section 4.)*

The School of Architecture's 2020Forward planning was kicked into high gear at the January 2016 faculty retreat, at which self-assessment and the NAAB perspectives were discussed in depth. The planning was built on the previous 2020 plan, informed by an assessment of progress toward the goals of the previous plan ("Architecture 2020 Plan Progress Report", *included in Section 4*), coordinated with the College of AAH plan, and the evolving cultural and institutional contexts. "School of Architecture 2020FORWARD Strategic Plan 2016-2020", was reviewed at the April 2016 faculty retreat, and approved at the August 2016 faculty retreat. *(Included in Section 4.)*

The School of Architecture's long-range planning and its means of identifying objectives for student learning respond to multiple data and information sources, external and internal, including tracking national trends in architectural education and architectural practice. We track 10-year trends and regular compare our school and programs to our peers in terms of tuition rates, areas of specialization,

enrollment trends, faculty/student ratios, and others. School leadership and faculty stay abreast of these trends through participation and leadership in professional organizations, attendance at conferences, serving as visiting critics at other institutions, and through their own research and practice.

As part of the 2020Forward Planning Process, the school's faculty completed a SWOT analysis and program self-assessment, *(see Section 4).* Highlights of this SWOT include:

- STRENGTHS: Faculty diversity; Pluralism; Collaboration/collegiality; Diversity of opportunities for the students; Facilities; Fluid Campus; Support from the wider university; Staff/Administration; Alumni support and engagement; Integration of research and teaching; Service Learning; Graduate tuition
- WEAKNESSES: Fabrication space, equipment and access; Printing/plotting access; Lack of environmental technology courses in BA; Bureaucratic burden; Lack of senior faculty; Virtual/video communications; Technology and theory in UG program; Shortage of outside guest critics
- OPPORTUNITIES: Expand opportunities for graduate and PhD students/assistants; Promotion of junior faculty; Various research tracks and multi-disciplinary collaborations; CDC+C facility, location and expanding programs; Opportunities for HS students; Univeristy and industry engagement
- THREATS: Changes in the university's fiscal strategies and systems and budgeting process; University HR and business and global engagement systems; Work load and burn out of faculty; Doing too much and "keeping all the planes in the air"; External competition

I.1.6.A Program Self-Assessment

The preparations for the university's 2020Forward Planning and the NAAB visit, including the preparation of this APR, have encouraged significant self-assessment. But even without strategic planning and a NAAB visit, ongoing assessment is constant, and its sources are broad. More formally, in addition to all of the normal faculty and curriculum meetings, at least once per year, typically at the spring faculty retreat, we use a slightly revised PetchaKucha style format to present each course by its instructor/coordinator. The courses and curricula are organized chronologically, thus quickly and efficiently illustrating student learning progress, and the gaps and overlaps between courses and topics.

The School has historically benefited from a strong and open relationship with alumni who regularly let us know how we're doing. The CAF and Professional Advisory Board are regular contributors to self-assessment. Each board meeting has an opportunity for student or faculty engagement with board members. Exit interviews with graduating students are conducted each semester. Alumni surveys are periodically conducted, including the most recent alumni survey, *(see Section 4).* The school's Faculty and Student Advisory committee contributes to assessment, as do ad hoc committees, such as a Fluid Campus Task Force that engaged alumni and friends in a process of review and recommendations.

Institutional Requirements for Self-Assessment: Assessment is an integral part of the institutional strategy to maintain standards of performance and achievement. SACS, the Southern Association of Colleges and Schools, is the regional body for accreditation of degree-granting higher education institutions in the Southern states. The university's accreditation was reaffirmed in 2013. The South Carolina Commission on Higher Education (CHE) reviews individual college programs on a regular basis.

A variety of other assessment procedures are built into School and University practices that, together, form a system of checks and balances intended to maintain standards of performance and achievement at all levels. Among these are the following:

- Teaching evaluations - Students evaluate all courses and all instructors in the School through the course evaluation system required by the University. The Director of the School reviews the student evaluation of classroom performance for every faculty member during the annual evaluation.
- Faculty evaluations - All faculty members complete the annual FAS (Faculty Activity System) statement of goals and end of year report, approved by the Director and evaluated at the end of year.
- Reappointment review – Tenure-track faculty and lecturers are evaluated by the Peer Review Committee of senior faculty and the School Director for annual reappointment.

- Tenure and promotion review - Review after six years by peer committee and Director with recommendations to the Dean for final decision
- Post tenure review - the performance of all tenured faculty members is assessed every 6 years by a committee and the Director with recommendations made to the Dean for final decision
- Evaluation of the Director - The Dean of AAH evaluates the Director every year. A formal review with input from the faculty, is held after the initial 2 years of an appointment, and then every 4 years after.
- Evaluation of Centers, Institutes and administrators – Centers and Institutes are required by the university to be reviewed at least every 5 years, (the school's practice has typically been every 3 years). Program directors and others receiving administrative stipends are reviewed every 3 years.

WEAVEonline, http://www.clemson.edu/assessment/weave/index.html, is a Web-based assessment management system that was developed by Virginia Commonwealth University that supports the SACS Principles of Accreditation. All academic programs are required to annually update their WEAVEonline reports. This system is maintained by the university's Office for Institutional Assessment, https://www.clemson.edu/assessment/index.html, which provides leadership and assistance in developing and overseeing a program of evaluation and feedback to enhance the effectiveness of the University.

I.1.6.B. Curricular Assessment and Development

Discussions on course content, pedagogy, program direction, and curriculum-related matters occur at faculty meetings. Year levels have coordinators, many of whom have regular coordination meetings. Curriculum assessment and revision is managed by the School's Curriculum and Assessment Committee, which consists of 3 members representing the teaching streams, (Design, Technology, Humanities), serving three-year staggered terms, and the Directors of the Undergraduate and Graduate Programs. The committee elects a chairperson who serves on the College Curriculum Committee, and a secretary who serves as the alternate. The departmental committee accepts proposals from the teaching streams and individual faculty, reviews proposals, and makes recommendations. The committee votes, then the faculty votes. After departmental approval, curriculum changes are brought before the College Curriculum Committee and the University Graduate or Undergraduate Curriculum Committee. For new programs, changes in curriculum and academic organization, other reviews and approvals are required. See http://www.clemson.edu/institutional-effectiveness/academics/approval.html.

Long-range planning and self-assessment have led to curricular and operational improvements, including: Revised semesters of off- and fluid-campus semesters in the graduate and undergraduate programs; Improved coordination of required courses between fluid campus locations; Expansion and revision of HT sequence in the M.Arch; Offering of elective undergraduate Structures II course; Development and offering of two graduate certificates.

The School of Architecture completed a survey of recent alumni in May 2016, *(see Section 4).* Areas of satisfaction of how "Clemson University's School of Architecture prepared you for the workforce", highlighted by respondents included: Fluid campus, off-campus study; Critical thinking, communication and leadership skills through team projects; Comprehensive studio (M.Arch); Rigor and breadth of curriculum/education; Hands-on experience, client relations, service-learning; Networking opportunities; Quality and dedication of teaching faculty. Areas of dissatisfaction of how "Clemson University's School of Architecture prepared you for the workforce" included: Weak preparation with software, like Revit, for the workforce; Need better practical preparation for the workforce;Need more technical, structures and material content (particularly in the BA), and rigor (particularly in the M.Arch).

The survey results largely confirm what we have learned in exit interviews, which also include the following comments:

- Undergrads would like to better know the faculty, and seek a more social learning culture
- Undergrads and grads want their professors to improve course scheduling, communications about assignments and expectations, and assessment, including grading
- Fluid studios, in Clemson, receive high marks from undergrads, and lower marks from grads

Section 2. Progress since the Previous Visit

1. Plans for/Progress in Addressing Conditions Not Met from the Most Recent Visiting Team Report

a. Conditions I.1-I.5 or II.2-II.3
None

b. Conditions II.1 (Student Performance Criteria)

B. 11 Building Service Systems

Comment from previous VTR (2011):
For Tracks 1, 2, and 3, Arch 874 – Technical Resolution included curriculum regarding electrical system design, and class Arch 892 – Comprehensive Studio demonstrated understanding of vertical circulation systems. Numerous studios demonstrated understanding of plumbing systems as they apply to sustainable systems for water conservation. That said, very little evidence was present demonstrating understanding of plumbing and electrical design, and no evidence was present indicating understanding of security or fire protection systems.

Plans for/Progress in addressing this concern:
ARCH 8730: Environmental Systems, ARCH 8740: Technical Resolution, and ARCH 8920: Comprehensive Studio, are endeavoring to be more attentive to these systems.

C. 4 Project Management

Comment from previous VTR (2011):
For all tracks, while evidence was found in the class Arch 881 – Professional Practice Survey taught in Charleston, it was not found in the curriculum for the same class or other courses taught at Clemson.

Plans for/Progress in addressing this concern:
Project management is being covered in ARCH 8810: Professional Practice I. This course has been reinvented and is being taught by the school director.

2. Plans for/Progress in Addressing Causes of Concern from the Most Recent Visiting Team Report

A. Structures Course Issue:

Comment from previous VTR (2011):
When the undergraduate program was changed from a Bachelor of Science in Architecture to a Bachelor of Arts and the number of required hours was reduced from 140 hours to 121 hours, a second structures course was removed from the mandatory undergraduate requirements. Undergraduate students are finding that without this course they are not eligible for 2-year M. Arch programs at Clemson and other institutions. Chair Schwennsen is addressing this problem, with the addition of a summer on-line structures class but many undergraduate students felt strongly that this is a major concern and needs an additional solution.

Plans for/Progress in addressing this concern:
This concern has been addressed with the addition of ARCH 2710 Structures II, as an elective in the undergraduate program. Students are advised to take this course if they are hoping to enter a 2-year M.Arch. program. The course is offered every spring semester and typically has an enrollment of 20-35 students.

B. I.2.4. – Financial Resources:

Comment from previous VTR (2011)
Though existing financial resources for the School of Architecture are adequate at present, there is concern regarding the future of the Richard A. McMahan Fund for Excellence, which has in previous years accounted for between 14% to 18% of School revenues. Following the recent passing of Mr. McMahon (who had provided the School of Architecture with a generous annual gift of $250,000), this funding source is in question. The loss of this revenue stream could result in significant financial challenges to the school.

Plans for/Progress in addressing this concern:
This concern has been addressed. Knowing how dependent the school was on those funds, the university generously replaced that "soft money" of the McMahan Fund with a new annually recurring budget revenue line item of $250,000, "Architecture Program Development Budget", which the school is utilizing in much the same way it used the previous fund.

There have been additional fiscal changes since the last visit. Between FY 2012 and 2015, the school had to administer a 13.82% reduction of its state budget allocation. These university-wide budget reductions were used as divestments to invest in other areas, i.e., they were budget reallocations. In our case, as in most, those reallocations were used to increase faculty salaries to bring them in line with peer average salaries.

All units have been challenged to be more entrepreneurial. Our fiscal changes have included: The change from Tier II to Tier I tuition for our graduate program (and that tuition differential coming to us); an increase in our lab fees to the maximum of $200 per studio; Regular successful proposals for university-wide infrastructure funds. Increased sponsored funding, industry partnerships and development funds (endowment proceeds and annual gifts) have also contributed greatly to our fiscal position, and to our ability to support faculty.

We have discovered and reassigned endowments, with the help of the dean's office, CAF staff and CUF. We have realigned the language and the use of endowments to better support/retain students and faculty. The school director has spent much more time on "friend-raising" and fund-raising. In FY 2013, 4 years ago, the School of Architecture had total expenditures of about $4 M. In the most recent completed fiscal year, FY16, the combined five fiscal departments of the School of Architecture had a total budget of $5.8 M, not including sponsored grants, or endowments for the sole purpose of student scholarships, fellowships and travel grants-in-aid. The School has become increasingly entrepreneurial, and could not function as it does without foundation funds, sponsored grants and other self-generated revenues.

C. II.1.1. Student Performance Critieria

Comment from previous VTR (2011)
B.4 Site Design: The team is concerned with the lack of diversity of site types and the opportunity to incorporate principles of site layout such as: grading, parking and handicap accessibility. The majority of the work presented involved projects on compact, flat, urban sites.

Plans for/Progress in addressing this concern:
This concern is being addressed in studios at all levels, by purposefully including a variety of site conditions beyond flat, urban sites. Beginning with ARCH 8410 Design Studio I, we are trying to avoid site-irrelevant object-making habits, and engaging students with a full range of site design issues.

3. Changes made to the program as a result of changes in the Conditions

There have been few if any changes made to the program as a result of changes in the Conditions. Changes made to the program have been made based on self-assessment, and long-range planning.

Section 3. Compliance with the Conditions for Accreditation

I.2.1 Human Resources and Human Resource Development
The program can demonstrate that it has appropriate human resources to support student learning and achievement.

Human Resources

On the Clemson University campus, there are currently 26 full-time faculty: 11 tenured, 8 tenure track, 5 lecturers, 1 Professor of Practice, and 1 Research Assistant Professor. Additionally in Clemson, there are 3 part-time lecturers. The Clemson Architecture Center in Charleston has 1 tenured faculty member, 1 full-time senior lecturer, and 2-4 part-time lecturers. Genoa has one full time lecturer and four part time lecturers. The Barcelona Architecture Center provides its own staff and faculty, most of whom are practicing Barcelona architects.

See the "Matrix for Faculty Credentials" at the end of this section for the teaching assignments for the most recent 2 years. In addition to teaching, tenured and tenure track faculty members are expected to carry on research, participate in academic advising and serve on committees at the School, College or University levels. Some faculty members also hold administrative assignments, as described in I.2.5 below.

The School employs five administrative staff persons in Clemson who share the duties of administration and support to faculty and students. Their duties are as follows:

- Administrative Assistant (Nancy Brown) works directly with the Director, and is the principal staff support for faculty and personnel. 100% staff responsibilities.
- Student Services Coordinator (Michelle McLane) is in charge of student services and also serves as the school's scheduling coordinator. 100% staff responsibilities.
- Accountant/Fiscal Analyst (Esther Kauffman) is in charge of all accounting and business for the School and processing all requests from faculty. 100% staff responsibilities.
- Administrative Assistant of the Clemson Architectural Foundation, CAF (Kaycee Collins) works with the school Director, the CAF Board and Executive Committee and the university's office of development.
- Administrative Coordinator for President Emeritus James Barker (Dana Anderson) provides support for the unique responsibilities of Jim Barker.

The school's non-administrative, specialized staff includes:
- Manager of Digital Design Shop and Materials Lab (Brian Leounis, AIA) who manages the school's fabrication facilities, equipment, programs and student workers.
- Project Coordinator of the Center for Health Facilities Design and Testing (Lynn McCracken) works with Dr. Anjali Joseph and her team.

The School of Architecture is further supported by the following staff in its off-campus programs.

- Administrative Coordinator (Miriam Rose) works with the director of the Clemson Architecture Center in Charleston.
- Genoa Center Administrator (Silvia Siboldi Carroll) manages all administration and personnel matters in Italy.
- The university's Office of Global Engagement, and Study Abroad Coordinator (Spencer Davenport), a member of the Dean's Office staff, works with Architecture and Landscape Architecture students and faculty in off-campus program coordination and management.

<u>Appropriateness of Human Resources to Support Student Learning and Achievement</u>

The workload of Clemson University faculty is generally assumed to be a 4-block workload per semester. Teaching loads vary by discipline, but for Architecture typically 3 blocks are consumed by teaching, and the 4th block is reserved for scholarship, research, and service. Service is an obligation of all faculty members. Teaching loads can be reduced by administrative responsibilities and/or significant research and scholarship. Faculty have a broad range of areas of expertise, a great diversity of educational and professional pedigrees, significant scholarly accomplishments, and appropriate ambition. The school's Director regularly boasts of the "high-performing, low-drama" nature of the faculty.

The School of Architecture faculty have a typical teaching load of one studio, (a 6-credit studio counts for two teaching blocks), and one additional class each semester. This is true for those who teach at the undergraduate and graduate levels. Studios typically meet at the undergraduate first year level for five to six hours per week, at the sophomore to senior levels for twelve hours per week. At the graduate level, studios meet for a total of twelve hours per week. Faculty who conduct thesis research, mentor PhD students, teach independent studies or additional creative inquiry courses tend to carry a higher teaching load.

66% of Architecture's class sections have fewer than 20 students. Design studios in the graduate program have typical enrollments of 8-13 students per section. In the undergraduate program design studios average about 13 students/section, except for in the 1st year in which sections are larger and supported by graduate assistants. In recent years, the average student credit load in Architecture has averaged approximately 218 student credit hours per full-time instructional faculty member. The student/faculty ratio throughout the school is approximately 12.6 architecture major students (undergraduate and graduate)/Architecture FTE faculty.

Human Resource Development

The Policies and Procedures for Appointment, Reappointment, Promotion, and Tenure

The university has two reappointment and faculty performance assessment processes/systems:

1. The Annual Performance Evaluation process, supported via the Faculty Activity System, for all faculty from lecturers to tenured full professors, for annual performance review and assessment by the school director/chair. See the "Faculty Manual IV.D. Annual Performance Evaluation and Salary Determination Procedures", http://www.clemson.edu/faculty-staff/faculty-senate/documents/manual-archive/2015-16.pdf

   > "Every individual appointed to a regular or special faculty rank shall be evaluated in each year, regardless of tenure status. The purpose of the annual performance cycle is for the immediate supervisor (department chair or school director) and the faculty member to mutually document goals and assignments, for the faculty member to document performance and for the immediate supervisor to document her/his assessment of the annual performance. Such an evaluation is independent of reviews for the purpose of reappointment, tenure or promotion, although the annual performance evaluations are a critical data point in post-tenure review. Annual performance evaluations are also used, along with other data, in salary determination."

2. The Reappointment, Tenure, and Promotion system

The school's Policy and Procedures for Tenure, Promotion and Reappointments (TPR) are regularly reviewed, and were last amended in March of 2016 with the addition of "research faculty". The school's bylaws were amended at that same time. *Both are appended in Section 4*, and are also posted on the school's website under "Policies & Practices".

The School of Architecture Tenure, Promotion and Reappointment (TPR) Committee, constituted of 3 members as described in the Bylaws, reviews matters of annual appointment, tenure and promotion and in each case prepares a formal recommendation which is submitted to the candidate via the eTPR system. The Director reviews the applicant's submission materials independently and makes a separate recommendation via the same system. The Dean has access to the committee and director's review, and makes a separate recommendation. All tenure-track faculty members are reviewed annually with this process and system.

See "Faculty Manual IV.B. Policies for Reappointment, Tenure, and Promotion", http://www.clemson.edu/faculty-staff/faculty-senate/documents/manual-archive/2015-16.pdf for the university's TPR requirements. The School of Architecture's TPR Policies and Procedures are *included in Section 4 of this report.* A brief introduction follows:

> Clause 3 Criteria
> The School of Architecture Peer Review Committee feels that all faculty should comply to the following universal criterion:
>
> Faculty should be evaluated by its excellence as per the broad criterion outlined below. These criteria are intended to help define and evaluate the work of faculty in ways that reflect more realistically the full range of academic and civic mandates. The granting of reappointment promotion or tenure shall be considered in light of the person's demonstrated ability as a teacher who is convincingly able to:
>
> educate, counsel and inspire students
> and in addition, has broadened his or her outlook in order to:
>
> 1) Add to a collective body of knowledge (the explication of scholarship, the research tradition)
> 2) Heighten one's professional skills (practice/professional relationships)
> 3) Advance institutional objectives (service within the university)
> 4) Contribute to the public well-being (service outside the university)

Evidence of How Faculty Remain Current in Knowledge of the Discipline, Practice and Licensure

Faculty stay current in their areas of expertise through regular interaction with disciplinal peers, attendance at conferences, continuing education and workshops, independent and collaborative research and scholarship, consulting, sabbaticals, and travel. Some faculty members continue to be engaged in architectural practice. These individuals find time to engage small commissions and/or serve in consulting roles. The University requires full-time faculty members engaged in consulting to limit their involvement during the regular academic year. Those faculty members that are licensed are required to fulfill their Continuing Education credits each year. Those faculty members that are working towards licensing continue to study for the ARE.

A list of faculty research and scholarship since the last NAAB visit follows this section, and clearly illustrates faculty's successful efforts to remain current.

Evidence of the School's Facilitation of Faculty Development, Research, Scholarship & Creative Activities

The Faculty in the School of Architecture qualify for small grants from various internal sources to initiate and advance research interests. These include University Research Incentive awards, College of Architecture, College of AAH Collaborative Research Grants, College of AAH Faculty Development Grants and Faculty Research Fellowships, and Pennell Center grants. The CAAH Office of Research Support in Lee Hall is an approved university Office of Sponsored Programs satellite office, providing professional grant proposal development, award acceptance, and research administrative services. A

number of faculty make good use of this support, and are successful in attaining external sponsored support from the NSF, AHRQ and others.

Every faculty member who has had a presentation accepted at a major conference has been given full or partial funding through the school's endowment funds. Probationary faculty are sometimes supported for conference travel even if not making a peer-reviewed presentation, for the purpose of building a professional network. In FY2016, the school made available, and spent, $75,000 of our annual budget on faculty travel. The total amount spent from all fund sources for travel in 2015/2016 was $244,411. This includes both faculty and student travel, but the vast majority of it was for faculty. A record of funds distributed through endowments for this and other purposes can be found under Section I.2.3 Financial Resources. The school further supports its faculty by submitting them for recognition and awards, providing graduate assistants, and providing faculty mentors for all probationary faculty.

Named professorships and endowed chairs contribute to faculty development. In addition to the Spartanburg Regional Health System Endowed Chair in Architecture + Health Design (Dr. Anjali Joseph), the school has the Robert Mills Professor (currently Dr. Peter Laurence, but recently Dan Harding, Vincent Blouin and David Allison), the Mickel Endowed Chair (most recently Dr. Keith Green, to be replaced through a faculty search in FY17), and will soon have an additional named professorship, the Reeves McCall Professorship (fully endowed, but awaiting maturation). Additionally, Professor David Allison is a Clemson University Alumni Distinguished Professor.

The college of AAH created a Creativity Professorship program in 2010, to reward and celebrate creativity in the college. Each Creativity Professor receives a total of $10,000 over a two-year period, (a $2,500 salary supplement and an annual professional development fund of $2,500). Architecture faculty have been very successful in competing for these positions. Architecture's creativity professors have included: Dustin Albright, Ufuk Ersoy, Rob Silance, Dan Harding, and Ulrike Heine.

The College considers sabbatical leave requests every year from the faculties in each of the departments. Awards are made based on the merit of the proposal and the ability of the departments to absorb the absence of the particular faculty member. Recipients of sabbatical leave must demonstrate the way in which their proposed activity will benefit the department and further the University's goals. A report and public presentation of outcomes is expected at the end of the leave. Since the last accreditation, the following sabbaticals have been granted: David Allison, Fall 2012; Keith Green, Fall 2014; Dina Battisto, Spring 2015; James Barker (1-year sabbatical provided by the university, January 1, 2014 – December 31, 2014).

Since the last accreditation visit, the school and the college have supported small grants and course releases, in addition to administrative position course releases, for faculty research, scholarship and creative activities, including for the following: Sallie Hambright-Belue, Peter Laurence, Keith Green, Dina Battisto, Michale Carlos Barrios Kleiss, David Lee, Dustin Albright.

There are also opportunities for faculty to participate in the off-campus program in Genoa. This provides the opportunity for testing new teaching methods and the possibility for reflecting on academic life in Clemson. Resident professors get all transportation costs paid, including study travel in Europe, plus accommodations and meals for him/herself and the family while in Genoa. Since the last review, the Genoa Professors in Residence have included Houayek, Ault, Lee, Bruhns, Schafer, Harding, Schott, and Matt Stewart (Landscape Architecture faculty).

Student Support Services

Student support services are distributed between a number of staff at school, college and university levels, and many faculty.

The school's Student Services Program Coordinator, Michelle McLane, is a linchpin for much of the student support. This position makes sure that students are registered correctly, have their advising needs met, and graduate successfully. For undergraduate students, this position works with the incoming freshman during summer orientation, helping them to register and understand what to expect their first year. This position also serves as a contact for students who are on academic probation, who may need guidance and advising on what their next steps should be, pointing them in the direction of the Academic Success Center for additional services. We also work closely with the Office of Global Engagement to make sure that students participating in our Off Campus programs are advised and prepared prior to their leaving, as well as while they are at one of our fluid campus locations. For graduate students, this position ensures that they are registered correctly, that all assistantships and fellowships have been reported to the correct campus offices, and payroll paperwork completed. This position also serves as a coordinator for the Career Expo, Open House, and Masters of Architecture banquet, that is held each year. Schedule coordination is one of the newest job duties of this position. We are constantly looking at the next semester's schedule and evaluating, updating, and changing information based on the needs of that semester, whether it's classroom space, class times, or drop/adds.

Architectural Licensing Advisor(s)

Associate Professor Rob Silance serves as the school's Architectural Licensing Advisor. Each fall, Rob along with professional and staff representatives from the South Carolina Architectural Licensing Board and/or NCARB meet with both undergraduate and graduate students to discuss professional licensing and the Intern Architectural Experience Program. The South Carolina Licensing Board provides monetary support for students applying to the IDP.

In addition to meeting with students, Professor Silance also attends national conferences each year to stay current with all the new policies and procedures associated with the AXP and professional licensing. Rob also organizes tours of campus construction projects for AXP registrants. Amy Trick, a final year M.Arch student, is serving as the student Architectural Licensing Advisor.

Internships and Career Advising:

Recent graduates of the school's programs have been very successful in finding post-graduation employment in firms and businesses regionally, nationally and globally. The school's career expo is discussed in Section 1. This, the CAF and the Professional Advisory Board, the strong alumni network, and the faculty, all together provide career advice and networks for students and graduates. In Charleston, most students are engaged in internships in the mornings, and classes in the afternoons. The Architecture + Health program has been successful in placing 100% of its students in summer internships and full time internships with firms across the US who have a focus in healthcare architecture.

This success in all of the school's programs is aided by faculty engagement with professional organizations at the national level, the past performance of students and graduates of the programs, and the network of alumni who remain enaged with the programs. Students also have a chance to network with professionals at local, regional and national conferences.

A matrix for each of the two academic years prior to the preparation of the APR follows.

See section 4 for a resume, using the required template, for each full-time member of the instructional faculty who teaches in the professional degree program.
https://www.dropbox.com/s/119n2v0do3umn1c/4.3.4.%20Faculty%20Resumes.pdf?dl=0

See Section 4 for a list of past and projected faculty research (funded or otherwise), scholarship, creative activities by full-time instructional faculty since the previous visit.
https://www.dropbox.com/s/1tvle6osykatnnd/4.3.5.%20Listing%20of%20Faculty%20Research.pdf?dl=0

FACULTY MATRIX: FALL SEMESTER 2014 (page 1 of 4)

Faculty member (alpha order)	Summary of expertise, recent research, or experience (limit 25 words)	License / State	Course number	Course number	Course number	Course number
Albright, Dustin	Dustin's dual backgrounds in structural engineering and architecture shape his approach to interdisciplinary instruction and research, which revolve around structural assemblies and advanced timber systems.		2700	8510		
Allison, David	Expertise is focused on integrating teaching, research and scholarship related to the design of health care facilities and healthy environments at all scales.	CA SC NC	8580	8950		
Battisto, Dina	Healthcare planning, design and post-occupancy evaluation: applying research throughout the design process to generate facility assessment methodologies, practical architectural knowledge, and educational tools.		6850	8210	8900	
Blouin, Vincent	Multi-physics modeling for design and optimization of high performance buildings with integration of smart materials and renewable energy systems.		4990/6990	8580	8760	
Bray, Lloyd	Professional architect with emphasis in teaching architectural graphics courses.	SC-8285 GA-3851	4290/6290			
Bruhns, Robert	Academic & teaching interests include 19th and 20th century Architecture history, urbanism, and vernacular architectural form. Interests also include studio linkages from famous, celebrated architectures to everyday, quotidian works.	GA-7684	4290/6290			
Choma, Joseph	Joseph's research pursues the physical realization of mathematically defined structures and the advancement of design pedagogy through computational thinking. Additionally he has authored 2 books.		2510/2511			
Craig, Lynn	An Emeritus Professor with 35 years of teaching and administrative experience at Clemson. His research interests focus on Green Building Design, Sustainable Environmental Planning, Campus Master Planning, Trends in Professional Practice and Hand Drawn Graphic Communication.	SC-3289 UK	4990/6990			
Edwards, Byron	Professor of Practice with 35 years in Healthcare Design Professional Practice 2014 NCARB Grant on Ambulatory Care, 2014 AC+A GOALI Grant on Integrated Project Delivery	SC-4563 NC-8485	8950			

FACULTY MATRIX: FALL SEMESTER 2014 (page 2 of 4)

Ersoy, Ufuk	Ersoy works on architectural history and material imagination. His recent research compares the glass cultures of the nineteenth and twentieth-century architectures.	Izmir, Turkey	8510	8600			
Franco, David	Licensed Architect in Spain since 2001; 15 years of practice -14 awards in Int. Arch. Competitions; PhD Arch. Theory	Madrid-14168	8510				
Hambright-Belue, Sallie	My research is based in three areas of study: Beginning Design Pedagogy; Intersections of Architecture and Agriculture; and Collaborative Practice Pedagogy.	NY	1010	3510/3511	4990/6990	8570	
Harding, Dan	20+ years of design + build professional and educational experience/leadership. Research emphasis on leveraging technology and material conciseness to increase design excellence, craft and constructive community engagement.		3510/3511	8570	8720/8721		
Hecker, Doug	Expert in digital fabrication in the service of pressing social issues with an emphasis on emergency and transitional housing.		3510/3511	4520/4521	8570	8790	
Heine, Ulrike	Sustainability: energy performance; passive design strategies; community service; design integration; local construction methods; history of detailing. Research focus: affordable sustainable housing	Berlin, Germany	8510				
Hogan, Bob	40 years of experience as a teacher and administrative leader in architectural education. Primary research interests are in computer applications to architecture.		3510/3511	4900			
Huff, Ray	Teaching experience: 30 yrs; practicing architect: 40 yrs; CACC director: 19 yrs., founded CAC.C; FAIA; Teaching Clemson + Yale	SC NY	3520	8570			
Jacques, Annemarie	20+ years teaching design studio courses at Clemson. Licensed architect with 35+ years in professional practice.	SC-04321	2510/2511				
Jennings, Ashley	Expertise in historic preservation, renovation and adaptive reuse through architectural practice, with unique experience in architectural education related to professional practice and visualization.	SC-05303	4290/6290	4890/8890			
Kahera, Akel	Seasoned educator in architecture and urban environments; Research emphasis concentrates on Islamic art and architecture.		8690				

FACULTY MATRIX: FALL SEMESTER 2014 (page 3 of 4)							
Kleiss, Carlos B	Expertise in Computational Design and Morphology with a focus on parametric design, structural morphology, morphogenetic design, shape grammars, formal composition and creativity.	Venezuela	3510/3511	4520/4521	4990/6990		8570
Laurence, Peter	Architectural history and theory, with specializations in the history of architectural criticism; the history of urban design; and the life and work of Jane Jacobs		8410				
Lee, Dave	Year level coordinator and teacher for 10+ years; Research focus is an investigation of computational design methods; Expertise in parametric design, complex geometry, mathematical forms, systems thinking & rule-based design.		3530/3531	4120	4140		4160
Lindsey, Jacob	Emphasis in landscape architecture, history of place, and urban planning and design.		4710				
Mendez, Clarissa	Lecturer of team taught architecture foundation studios and coordinator of architectural portfolio design class.		2510/2511				
Mills, Criss	Taught undergraduate architecture studio for a total of 16 years (12 years at Clemson. Published book on using 3D models in design work education. Registered architect.		3510/3511				
Montilla, Armando	Teaching emphasis in architectural history and theory. Research interests were in areas of digital ecologies.		3510/3511	8570	8690		
Pastre, David	Teaching experience: Senior Lecturer/Shop Manager; 11 years Professional experience; cabinetmaker: 10 years		3520/3521	6770	8320		8570
Powers, Matt	Dr. Powers teaches environmental design studios at various scales. His research emphasizes cognitive-oriented pedagogy and landscapes designed to enable teaching, learning & play.		3510/3511				
Satoh, Junichi	Artist and architect with emphasis in graphic design and visualization. Guest lecturer and critic in schools worldwide since 1994.		8100	8410			
Schafer, George	Licensed architect (since 2008) with extensive design, project management and teaching (since 2009) experience.	NC-10567	3510/3511	4520/4521			
Schwennsen, Kate	Expertise in the evolution of the profession, through education and practice, leadership and diversity, with a special focus on women's leadership in architecture.	SC IA	8810				

FACULTY MATRIX: FALL SEMESTER 2014 (page 4 of 4)							
Silance, Rob	My research/expertise is in the areas of professional practice as a partial owner of a local architectural firm, product designer of the furniture system used in the School of Architecture, and a visual artist documenting the changes in the rural environment on display at the Spartanburg Museum of Art	SC-3401	2510/2511	4240/6240			
Skinner, Martha	Experience in studio teaching since 1993; Research looks at built environment as a delicate ecology and exploits representation methods that visualize the cycles of life in order to understand and more acutely address temporal, social and environmental issues.		4010				
Soleimani, Arash	At the time he was teaching this course Arash was a Ph.D student in Planning, Design and the Built Environment at Clemson.		4010				
Sweeney, Thomas	M.Arch with experience in project/product design and woodworking since 1995		4770/6770				
Wilkerson, Julie	Expertise in teaching the craft of architecture, with emphasis on bridging theoretical ideas with fundamental aspects of construction, practice and societal concerns.	SC-04636	3510/3511				

FACULTY MATRIX: SPRING SEMESTER 2015 (page 1 of 4)

Faculty member (alpha order)	Summary of expertise, recent research, or experience (limit 25 words)	License / State	Course number	Course number	Course number	Course number	Course number
Albright, Dustin	Dustin's dual backgrounds in structural engineering and architecture shape his approach to interdisciplinary instruction and research, which revolve around structural assemblies and advanced timber systems.		8710	8920			
Allison, David	Expertise is focused on integrating teaching, research and scholarship related to the design of health care facilities and healthy environments at all scales.	CA SC NC	8590	8910	8920		
Barker, James	Early focus of my teaching career was on Sense of Place in the American Small Town. After 24 years as dean and president, developed course on the architecture of leadership. Currently researching watercolor techniques.	SC	2520/2521	4990/6990			
Bausman, Dennis	Expertise is centered on construction methods, materials, and management. Extensive professional experience in construction at the project and company level and has a broad research program focused on issues relating to the built environment.		8200				
Blouin, Vincent	Multi-physics modeling for design and optimization of high performance buildings with integrations of smart materials and renewable energy systems.		4990/6990	8730/8731	8900		
Bruhns, Robert	Academic & teaching interests include 19th & 20th c. Architecture history, urbanism, and vernacular architectural form. Interests also include studio linkages from famous, celebrated architectures to everyday, quotidian works.	GA-7684	4521/4521	8610			
Choma, Joseph	Joseph's research pursues the physical realization of mathematically defined structures and the advancement of design pedagogy through computational thinking. Additionally he has authored 2 books.		2520/2521				

FACULTY MATRIX: SPRING SEMESTER 2015 (page 2 of 4)

Edwards, Byron	Professor of Practice with 35 years in Healthcare Design Professional Practice 2014 NCARB Grant on Ambulatory Care, 2014 AC+A GOALI Grant on Integrated Project Delivery	SC-4563 NC-8485	6880	8960				
Ersoy, Ufuk	Ersoy works on architectural history and material imagination. His recent research compares the glass cultures of the nineteenth and twentieth-century architectures.	Izmir, Turkey	3510/3511	4990/6990	8520			
Franco, David	Licensed Architect in Spain since 2001; 15 years of practice -14 awards in Int. Arch. Competitions; PhD Arch. Theory	Madrid-14168	8640	8920				
Green, Keith	Award-winning, licensed architect with many years of professional and academic studio experience.	SC-6610	8920					
Hambright-Belue, Sallie	My research is based in three areas of study: Beginning Design Pedagogy; Intersections of Architecture and Agriculture; and Collaborative Practice Pedagogy.	NY	1510/1511	4900	4990			
Harding, Dan	20+ years of design + build professional and educational experience/leadership. Research emphasis on leveraging technology and material conciseness to increase design excellence, craft and constructive community engagement.		3510/3511	4900	8320	8520		
Hecker, Doug	Expert in digital fabrication in the service of pressing social issues with an emphasis on emergency and transitional housing.		3510/3511	8110	8520			
Heine, Ulrike	Comprehensive design; Design integration; Sustainable strategies; Passive design strategies; Detailing; Construction documents	Berlin, Germany	8920					
Hogan, Bob	40 years of experience as a teacher and administrative leader in architectural education. Primary research interests are in computer applications to architecture.		2700					
Huff, Ray	Teaching experience: 30 yrs; practicing architect: 40 yrs; CACC director: 19 yrs., founded CAC.C; FAIA; Teaching Clemson + Yale	SC NY	3520/3521	8520				
Jacques, Annemarie	20+ years teaching design studio courses at Clemson. Licensed architect with 35+ years in professional practice.	SC-04321	3510/3511					

FACULTY MATRIX: SPRING SEMESTER 2015 (page 3 of 4)

Jacques, John	Emeritus professor who serve Clemson from 1973 to 2001 as an educator and administrative leader. Licensed architect.	SC	8740/8741					
Jennings, Ashley	Expertise in historic preservation, renovation and adaptive reuse through architectural practice, with unique experience in architectural education related to professional practice and visualization.	SC-05303	4290	4890	8890			
Joseph, Anjali	Expertise in Architecture + Health with a focus on conducting applied research on the impacts of the built environment on patient safety and quality, design for aging, design for active living.	India	8900					
Kleiss, Carlos B	Expertise in Computational Design and Morphology with a focus on parametric design, structural morphology, morphogenetic design, shape grammars, formal composition and creativity.	Venezuela	2710	4990	6990	8790		
Laurence, Peter	Architectural history and theory, with specializations in the history of architectural criticism; the history of urban design; and the life and work of Jane Jacobs		8420					
Lee, Dave	Year level coordinator and teacher for 10+ years; Research focus is an investigation of computational design methods; Expertise in parametric design, complex geometry, mathematical forms, systems thinking and rule-based design		2520/2521					
Lindsey, Jacob	Emphasis in landscape architecture, history of place, and urban planning and design.		4710					
Mendez, Clarissa	Lecturer of team taught architecture foundation studios and coordinator of architectural portfolio design class.		1510/1511	2520/2521				
Mills, Criss	Taught undergraduate architecture studio for a total of 16 years (12 years at Clemson. Published book on using 3D models in design work education. Registered architect.		4520/4521					
Montilla, Armando	Teaching emphasis in architectural history and theory. Research interests were in areas of digital ecologies.		3510/3511	8520	8620			
Pastre, David	Teaching experience: Senior Lecturer/ Shop Manager; 11 years Professional experience; Cabinetmaker: 10 years		3520/3521	4770				

FACULTY MATRIX: SPRING SEMESTER 2015 (page 4 of 4)								
Powers, Matt	Dr. Powers teaches environmental design studios at various scales. His research emphasizes cognitive-oriented pedagogy and landscapes designed to enable teaching, learning and play		3530/3531	4120	4140	4160	6120
Satoh, Junichi	Artist and architect with emphasis in graphic design and visualization. Guest lecturer and critic in schools worldwide since 1994.		1510/1511	4990/6990	8420		
Silance, Rob	My research/expertise is in the areas of professional practice as a partial owner of a local architectural firm, product design as a designer of the furniture system used in the School of Architecture and a visual artist documenting the changes in the rural environment on display at the Spartanburg Museum of Art.	SC-3401	1510/1511	8820			
Skinner, Martha	Experience in studio teaching since 1993; Research looks at built environment as a delicate ecology and exploits representation methods that visualize the cycles of life in order to understand and more acutely address temporal, social and environmental issues.		3510/3511	4010	4900	8520	8900
Soleimani, Arash	Ph.D. student in Planning, Development and the Built Environment while assisting with and teaching portions of this portfolio class.		4010				
Thomas, Jim	Teaching experience centers on architectural history and theory of place. Registered architect in three states.		8620				
Wilkerson, Julie	Expertise in teaching the craft of architecture, with emphasis on bridging theoretical ideas with fundamental aspects of construction, practice and societal concerns.	SC-04636	4520/4521	4900			

FACULTY MATRIX: FALL SEMESTER 2015 (page 1 of 4)

Faculty member (alpha order)	Summary of expertise, recent research, or experience (limit 25 words)	License / State	Course number	Course number	Course number	Course number	Course number
Albright, Dustin	Dustin's dual backgrounds in structural engineering and architecture shape his approach to interdisciplinary instruction and research, which revolve around structural assemblies and advanced timber systems.		6140	6770	8570		
Allison, David	Expertise is focused on integrating teaching, research and scholarship related to the design of health care facilities and healthy environments at all scales.	CA SC NC	8580	8590	8860	8970	
Barker, James	Early focus of my teaching career was on Sense of Place in the American Small Town. After 24 years as dean and president, developed course on the architecture of leadership. Currently researching watercolor techniques.	SC	2510/2511	4990	6990		
Battisto, Dina	Healthcare planning, design and post-occupancy evaluation; applying research throughout the design process to generate facility assessment methodologies, practical architectural knowledge, and educational tools		6850	8210	8580		
Blouin, Vincent	Multi-physics modeling for design and optimization of high performance buildings with integration of smart materials and renewable energy systems.		6990				
Brown, Tim	Practicing architect with a very wide range of project experience. Studio faculty member with expertise in advanced technologies, international education, and studio instruction across the entire graduate and undergraduate programs.	IL-014785 NC-12174	3510/3511	4520/4521	8570	8720/8721	
Bruhns, Robert	Teaching interests include the city in history & urbanism & vernacular architectural form. Outreach work includes renovation of circa 1913 post office to be utilized as the Newberry County Museum, coordinated with the local committee.	GA-7684	2040	3510/3511	6990		

FACULTY MATRIX: FALL SEMESTER 2015 (page 2 of 4)

Choma, Joseph	Joseph's research pursues the physical realization of mathematically defined structures and the advancement of design pedagogy through computational thinking. Additionally he has authored 2 books.		2510/2511	8100			
Craig, Lynn	An Emeritus Professor with 35 years of teaching and administrative experience at Clemson. His research interests focus on Green Building Design, Sustainable Environmental Planning, Campus Master Planning, Trends in Professional Practice and Hand Drawn Graphic Communication.	SC-3289 UK	4990	6990			
Edwards, Byron	Professor of Practice with 35 years in Healthcare Design Professional Practice 2015 Pennell Grant Award - Richard H. Pennell Center – Best Practices in ACCE accredited universities	SC-4563 NC-8485	3510/3511	8860			
Ersoy, Ufuk	Ersoy works on architectural history and material imagination. His recent research compares the glass cultures of the nineteenth and twentieth-century architectures.	Ismir, Turkey	8510	8600			
Franco, David	-Licensed Architect in Spain since 2001; -15 years of practice -14 awards in Int. Arch. Competitions; PhD Arch. Theory	Madrid-14168	8510				
Green, Keith	Author of MIT Press monograph on the subject; US NSF support for related research; internationally recognized figure in this research area.	SC-6610	8680				
Hambright-Belue, Sallie	My research is based in three areas of study: Beginning Design Pedagogy; Intersections of Architecture and Agriculture; and Collaborative Practice Pedagogy.	NY	1010	4990			
Harding, Dan	20+ years of design + build professional and education experience/leadership. Research emphasis on leveraging technology and material conciseness to increase design excellence, craft and constructive community engagement.		4990	6990	8410	8900	

FACULTY MATRIX: FALL SEMESTER 2015 (page 3 of 4)

Hecker, Doug	Expert in digital fabrication in the service of pressing social issues with an emphasis on emergency and transitional housing.		3510/3511	8570	8790			
Heine, Ulrike	Sustainability; Energy performance; Passive design strategies; Community service; Design integration; Local construction methods; History of detailing	Berlin, Germany	4990	6990	8510			
Hogan, Bob	40 years of experience as a teacher and administrative leader in architectural education. Primary research interests are in computer applications to architecture.		2700	4900				
Huff, Ray	Teaching experience: 30 yrs; practicing architect: 40 yrs; CACC director: 19 yrs., founded CAC.C; FAIA; Teaching Clemson + Yale	SC NY	3520/3521	4710	8570	8900		
Jennings, Ashley	Expertise in historic preservation, renovation and adaptive reuse through architectural practice, with unique experience in architectural education related to professional practice and visualization.	SC-05303	6290	8890				
Kleiss, Carlos B	Expertise in Computational Design and Morphology with a focus on parametric design, structural morphology, morphogenetic design, shape grammars, formal composition and creativity.	Venezuela	3510/3511	4990	6990	8570		
Lamprecht, Barbara	Professional experience in residential design and construction administration. Teaching experience at California State University.		6300					
Laurence, Peter	Architectural history and theory, with specializations in the history of architectural criticism; the history of urban design; and the life and work of Jane Jacobs		8410					
Lee, Dave	Coordinator and teacher for 10+ years; Research focus is an investigation of computational design methods; Expertise in parametric design, complex geometry, mathematical forms, systems thinking & rule based design.		2510/2511	4990				
Mendez, Clarissa	Lecturer of team taught architecture foundation studios and coordinator of architectural portfolio design class.		2510/2511	4010				

FACULTY MATRIX: FALL SEMESTER 2015 (page 4 of 4)

Mills, Criss	Taught undergraduate architecture studio for a total of 16 years (12 years at Clemson. Published book on using 3D models in design work education. Registered architect.		3510/3511	4900				
Pastre, David	Teaching experience: Senior Lecturer / Shop Manager; 11 years Professional experience; Cabinetmaking: 10 years.		4770	6770	8570			
Schafer, George	Licensed architect (since 2008) with extensive design, project management and teaching (since 2009) experience. Ph.D. in Planning, Design and the Built Environment (2015).	NC-10567	3530/3531	4120	6120	4140	4160	
Schurch, Thomas	Professor of City & Regional Planning in the Department of Landscape Architecture; Research interests include meaning in built and natural environments, regionalism, urban design and urban form.		3510/3511					
Schwennsen, Kate	Expertise in the evolution of the profession, through education and practice, leadership and diversity, with a special focus on women's leadership in architecture.	SC IA	8810					
Silance, Rob	My research/expertise is in the areas of professional practice as a partial owner of a local architectural firm, product design as a designer of the furniture system used in the School of Architecture and a visual artist documenting the changes in the rural environment on display at the Spartanburg Museum of Art.	SC-3401	2510/2511	4240	6240			
Wilkerson, Julie	Expertise in teaching the craft of architecture, with emphasis on bridging theoretical ideas with fundamental aspects of construction, practice and societal concerns.	SC-04636	3510/3511					

FACULTY MATRIX: SPRING SEMESTER 2016 (page 1 of 4)

Faculty member (alpha order)	Summary of expertise, recent research, or experience (limit 25 words)	License / State	Course number	Course number	Course number	Course number	Course number
Albright, Dustin	Dustin's dual backgrounds in structural engineering and architecture shape his approach to interdisciplinary instruction and research, which revolve around structural assemblies and advanced timber systems.		2700	8920			
Allison, David	Expertise is focused on integrating teaching, research and scholarship related to the design of health care facilities and healthy environments at all scales.	CA SC NC	8590	8910	8920		
Barker, James	Early focus of my career was on Sense of Place in the American Small Town. After 24 years as dean and president, developed course on the architecture of leadership. Currently researching watercolor techniques.	SC	2520/2521	4990	6990		
Battisto, Dina	Healthcare planning, design and post-occupancy evaluation; applying research throughout the design process to generate facility assessment methodologies, practical architectural knowledge, and educational tools.		8590	8940			
Bausman, Dennis	Expertise is centered on construction methods, materials, and management. Extensive professional experience in construction at the project and company level and has a broad research program focused on issues relating to the built environment.		8200				
Blouin, Vincent	Multi-physics modeling for design and optimization of high performance buildings with integration of smart materials and renewable energy systems.		8730/8731				
Brown, Tim	Practicing architect with a very wide range of project experience. Studio faculty member with expertise in advanced technologies, international education, and studio instruction across the entire graduate and undergraduate programs.	IL-014785 NC-12174	4520/4521				

FACULTY MATRIX: SPRING SEMESTER 2016 (page 2 of 4)

Bruhns, Robert	Teaching interests include the city in history & urbanism & vernacular architectural form. Outreach work includes renovation of circa 1913 post office to be utilized as the Newberry County Museum, coordinated with the local committee.	GA-7684	4520/4521	6990	8610			
Choma, Joseph	Joseph's research pursues the physical realization of mathematically defined structures and the advancement of design pedagogy through computational thinking. Additionally he has authored 2 books.		2520/2521	8110				
Edwards, Byron	Professor of Practice with 35 years in Healthcare Design Professional Practice 2015 Pennell Grant Award - Richard H. Pennell Center – Best Practices in ACCE accredited universities	SC-4563 NC-8485	6880	8960				
Ersoy, Ufuk	Ersoy works on architectural history and material imagination. His recent research compares the glass cultures of the nineteenth and twentieth-century architectures.	Ismir, Turkey	8920					
Franco, David	Licensed Architect in Spain since 2001; 15 years of practice 14 awards in Int. Arch. Competitions; PhD Arch. Theory	Madrid-14168	3510/3511	8520	8640			
Hambright-Belue, Sallie	My research is based in three areas of study: Beginning Design Pedagogy; Intersections of Architecture and Agriculture; and Collaborative Practice Pedagogy.	NY	1510/1511	4990	6990			
Harding, Dan	20+ years of design + build professional and educational experience/leadership. Research emphasis on leveraging technology and material conciseness to increase design excellence, craft and constructive community engagement.		3510/3511	4990	8320	8520		
Heine, Ulrike	Sustainability: energy performance; passive design strategies; community service; design integration; local construction methods; history of detailing. Research focus: affordable sustainable housing	Berlin, Germany	8920					

FACULTY MATRIX: SPRING SEMESTER 2016 (page 3 of 4)

Hogan, Bob	40 years of experience as a teacher and administrative leader in architectural education. Primary research interests are in computer applications to architecture.		2700					
Huff, Ray	Teaching experience: 30 yrs; practicing architect: 40 yrs; CACC director: 19 yrs., founded CAC.C; FAIA; Teaching Clemson + Yale	SC NY	3520/3521					
Jennings, Ashley	Expertise in historic preservation, renovation and adaptive reuse through architectural practice, with unique experience in architectural education related to professional practice and visualization.	SC-05303	4290	4890				
Joseph, Anjali	Expertise in Architecture + Health, with a focus on conducting applied research on the impacts of the built environment on patient safety and quality, design for aging, design for active living.	India	6990	8900				
Kleiss, Carlos B	Expertise in Computational Design and Morphology with a focus on parametric design, structural morphology, morphogenetic design, shape grammars, formal composition and creativity.		2710	4990	6990	8710	8790	
Laurence, Peter	Architectural history and theory, with specializations in the history of architectural criticism; the history of urban design; and the life and work of Jane Jacobs		8420	8900				
Lee, Dave	Year level coordinator and teacher for 10+ years; Research focus is an investigation of computational design methods; Expertise in parametric design, complex geometry, mathematical forms, systems thinking and rule-based design.		2520/2521	4990	8120			
Mendez, Clarissa	Lecturer of team taught architecture foundation studios and coordinator of architectural portfolio design class.		1510/1511	2520/2521				
Mills, Criss	Taught undergraduate architecture studio for a total of 16 years (12 years at Clemson. Published book on using 3D models in design work education. Registered architect.		4520/4521	4900				
Omidvar, LaDan	Licensed architect with 25+ years of professional practice experience and 10 years of experience teaching design studio.	IA-05067	1510/1511	2520/2521				

FACULTY MATRIX: SPRING SEMESTER 2016 (page 4 of 4)

Pastre, David	Teaching experience: Senior Lecturer / Shop Manager, 11 years Professional experience; Cabinetmaker: 10 years.		3520/3521	4770				
Schafer, George	Licensed architect (since 2008) with extensive design, project management and teaching (since 2009) experience. Ph.D. in Planning, Design and the Built Environment (2015).	NC-10567	3530/3531	4120	6120	4140	4160	
Schlein, William	Expertise centered in Architecture + Health; Private professional practice and registered architect in 10 states plus Washington D.C.; Practice advisor for A+H programs at two universities.	CA, GA, MD, NC, NJ, NY, PA, SC, TX, VA, DC	3510/3511	8520				
Schott, Joseph	Professional practice since 1987; 4 years of teaching experience; Maker-in-residence / Artist-in-Residence at five schools and at public libraries		3510/3511	8520	8740/8741			
Silance, Rob	My research/expertise is in the areas of professional practice as a partial owner of a local architectural firm, product designer of the furniture system used in the School of Architecture, and a visual artist documenting the changes in the rural environment on display at the Spartanburg Museum of Art	SC-3401	1510/1511	8820				
Terim, Berrin	Teach Architecture History/Theory and Design Studio with an emphasis on critical thinking and making Ph.D. candidate at Virginia Tech, and her research consists of theories of architectural representation and narrative.	Ismir, Turkey	4990	6990	8420	8620		
Thomas, Jim	Teaching experience centers on architectural history and theory of place. Registered architect in three states.	PA, NC, SC	4710					
Wang, Yixiao	Ph.D. student in Planning, Development and the Built Environment while assisting with and teaching elements of this portfolio course.		4010					
Wilkerson, Julie	Expertise in teaching the craft of architecture, with emphasis on bridging theoretical ideas with fundamental aspects of construction, practice and societal concerns.	SC-04636	4520/4521					

I.2.2 Physical Resources

The available physical resources of the school support the school's pedagogical approach and student achievement. The physical resources are distributed between Clemson, Charleston, Genoa and Barcelona. (The school has also had an intermittent elective summer studio in New York, in leased studio space, and for undergraduates. Those facilities are not included in this report.)

Changes since the most recent NAAB visit

Clemson: Lee III opened and Lee I and II renovated

In April 2010, ground was broken for Lee III a 55,000 s.f. building that is now the new home of the graduate architecture studios, faculty and administrative offices, as well as Landscape Architecture studios. Lee III was designed by Thomas Phifer and Partners and McMillan Pazdan Smith, assisted by Skidmore, Owings & Merrill (structural engineers) and Transolar (climate engineers). The building was completed in December 2011 and opened in January 2012. It has been the recipient of numerous regional and national design awards, including a 2013 AIA National Honor Award for Architecture, an American Institute of Steel Construction 2013 IDEAS Award, and a 2013 Excellence in Structural Engineering Outstanding Project Award from the National Council of Structural Engineers. It is a LEED Gold facility.

> During the new construction, Lee I and II were significantly renovated, including new offices, lighting, skylights, electrical and data connection and new finishes for the second floor undergraduate studios. Renovations to the Architecture + Health spaces completed in January 2011 expanded the program's working space to approximately 2,300 NSF, and included a seminar room, renovated studio space with an increase from 12 to16 workstations, new research spaces including 8 new MS/PhD student workstations and research workroom, a new HVAC system, new operable windows for additional day-lighting, natural ventilation and public visibility, new lighting fixtures, new electrical and data connections, and new furniture.

Charleston: Newly renovated facilities opened for the Clemson Design Center Charleston (CDC.C)

> Between the last NAAB visit and now, the university hired AlliedWorks Architecture to design a new building in Charleston to house an expanded Clemson Architecture Center and the Master of Science in Historic Preservation program. The design received much attention, and although it was successfully receiving formal approvals, the dissatisfaction of the neighborhood and a related lawsuit caused the university to withdraw the project.
>
> On August 25th, 2015, the school and university celebrated the ribbon-cutting of the newly created Clemson Design Center in Charleston (CDC.C), located in the historic Cigar Factory on the Charleston peninsula overlooking the Charleston harbor and Ravenel Bridge, one of America's largest cable-stay bridges. The CDC.C held its ribbon-cutting on August 25, 2016, bringing Architecture's almost 3-decade-old Charleston-based program into a shared space with the 17-year-old Master of Science in Historic Preservation, and providing additional space to house new and expanded programs. The Cigar Factory is a former textile mill in the tradition of mill buildings more typical of the "back country" of South Carolina. It is best known as the first place the celebrated Civil Rights anthem "We Shall Overcome" was ever sung in protest of mistreatment of African Americans in 1948.
>
> The space in the Cigar Factory is leased (5-year lease with an option for another 5-years), and is thus seen as a short-term solution.

Barcelona: Newly renovated facilities opened for the Barcelona Architecture Center (BAC)

The BAC moved into newly renovated storefront facilities beginning with the fall semester of 2014. These new facilities have space for approximately 50 students from Clemson University, Texas A&M University, Roger Williams University, and others.

General Description of Facilities

Clemson: Lee Hall Facilities

Named after long-time architecture professor and chair Rudolf E. Lee, the Lee Hall complex is shared by the Department of Art, and the School of Design and Building, which includes the departments of Planning, Development and Preservation, Landscape Architecture, Construction Science and Management, and the School of Architecture. It is comprised of the 40,000 s.f. original building known as "Lee I", a 48,000 s.f. building known as "Lee II", and the 55,000 sf "Lee III", thus totaling 153,000 s.f. Although the Lee Hall complex is shared by the larger School of Design and Building, and its various departments, the School of Architecture has dedicated spaces and shared, but consistently available spaces, for design studios, classroom teaching, and faculty and administration.

According to the university's Institutional Research office, in 2015 the School of Architecture (0503) had "Total General Academic Instruction Assignable Area" of 25,664 sf total, (all except 145 sf are in Lee Hall). This same resource states that 66% of Architecture's 2015 undergraduate classes had enrollments of less than 20. 7% had more than 50.

Sum Area by Usage, (source, https://www.clemson.edu/oirweb1/dm/StudentClassSize.cgi)

Room Use	Room Count	Assignable Area
Central Storage	1	240
Class Laboratory	12	18900
Classroom	1	314
Conference Room	2	1018
Conference Room Smart	1	338
Office (Dept. Chair)	1	225
Office (Faculty)	20	2573
Office (Grad Student)	4	1451
Office (Staff)	3	381
Office Service	4	224

Lee I is the original 40,000 s.f., two-level building built in 1958, that was originally the home of the College of Architecture. Considered a fine example of International Style architecture, it is now listed on the National Register of Historic Places. Today, it is shared by the various departments of the School of Design and Building.

Lee I - First Floor. The ground level of Lee I includes a presentation and review space (sometimes used as a seminar room) for the School of Architecture, faculty offices, a construction science classroom, the "small auditorium" (50 seats), and the Art Gallery.

Lee I - Second Floor. The upper level of Lee I houses the undergraduate architecture studios and classrooms and the Digital Design Shop.

The Clemson University School of Architecture Digital Design Shop (cusa.dds) is a cad/cam research lab for students and faculty experimenting with digital fabrication, cad/cam, and rapid

prototyping. The facility has a full array of state of the art equipment (laser cutters, cnc routers, and 3d printers) to undertake and pursue these research agendas. The cusa.dds facility is spread between a 3000 SF materials lab hosting traditional wood working equipment, (on the lowest level of Lee II) and large format CNC machines and a 1000 SF digital lab hosting a variety of laser and knife cutters, and 3D printers, and 15 high end workstations. The cusa.dds explores the possibilities of digital design and issues of materiality/tactility by synthesizing these tools into one facility and is designed as a platform for experimentation in these research areas. The cusa.dds and materials labs are operated, funded and managed by the School of Architecture, but open to all students in Lee Hall and beyond.

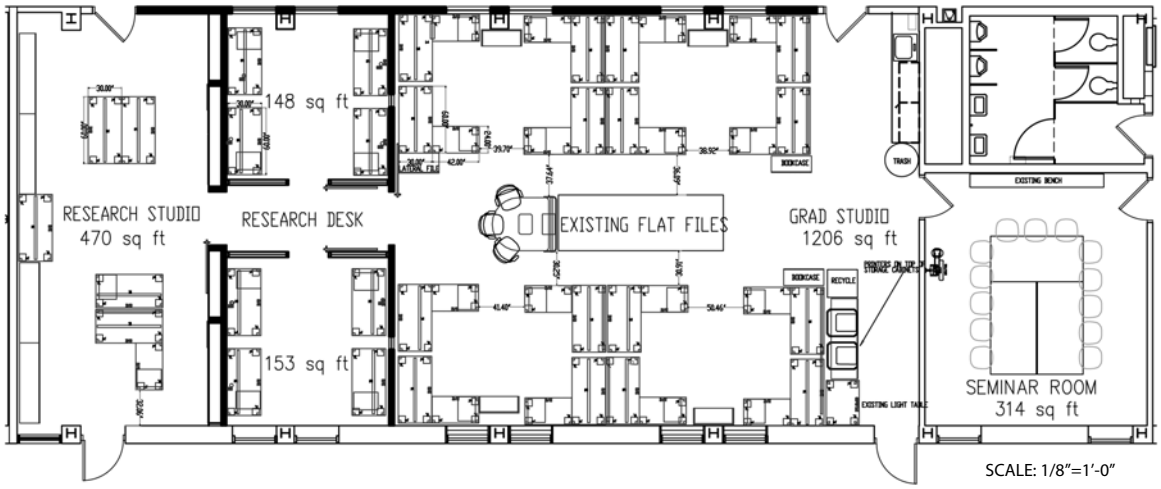
Lee II, built in 1975 and expanded in 1991, is a 48,000 s.f. building with four levels shared by the various departments of the School of Design and Building.

Lee II - Lower Level (First Floor). The lower level of Lee II houses the Visual Arts studios and Art Department faculty offices, as well as the wood shop. This level also includes the lower level of the Gunnin Architectural Library.

Wood Shop. The wood shop is a shared facility used by architecture students for model making, furniture making, and similar activities. The 3000 SF materials lab has traditional wood working equipment and large format CNC machines. In their first year, students are required to take an orientation covering the use of the equipment and safety issues.

Lee II - Main Floor (Second Floor). The entry floor (second floor) of Lee II contains the main lobby and entrance to the Lee Hall complex, the “large auditorium,” the main floor of the Gunnin Architectural Library, including a printing and scanning facility, and the newly renovated Architecture and Health studio. Along the main hallway between Lee I, Lee II and Lee III- the corridor dubbed “Broadway”- is where new gallery and presentation spaces align, as well as the bridge connection to the new Lee III building. Renovations were completed in December 2011.

The Architecture + Health program offers a unique studio workspace in Lee Hall on the Clemson Campus where M.Arch and MS students work intimately with PhD students and program faculty on integrated research and design projects. Many of the M.Arch students hold graduate assistantships where they support faculty research and scholarship, and as a result are provide with program funded computers and printer and scanner in the studio. The space is specifically organized along the lines of a professional practice and physically represents the philosophy of the program to optimize the exchange of ideas, collaboration and integrate professional education with research intended to advance professional practice.



Architecture + Health Studio Space
Lee II - Floors Three and Four. Most of the upper two levels of Lee II were renovated in fall 2010 and reopened for occupancy in January 2011, for the start of the spring semester. These levels include new offices for faculty and administration of the various departments of the School of Design and Building.

Lee III, the 55,000 s.f. addition to Lee Hall has a ground floor of 150' by 250' in its extents, and a mezzanine level of approximately 25,000 s.f. connected to the main level of Lee II. The open floor plan is used largely as studio space, but is punctuated by seminar and presentation rooms on the ground floor, and conference rooms and faculty offices on the mezzanine level. The building is distinguished spatially and atmospherically by its transparency, open spaces, view to above and below, extensive array of skylights, and exposed structure distinguished by tree-like columns that frame and are illuminated by large skylights above them. The building is designed to be an elegant and didactic expression of spatial and structural organization and systems, and to foster communication and collaboration in its open plan. With a geothermal system and sophisticated climate engineering by Transsolar, the building received LEED Gold certification, and is a low to net zero energy consumer. The primary occupants of the building are the graduate and undergraduate landscape architecture studios and the graduate architecture studios.

Lee III Graduate Architecture Studio Spaces. The studio spaces are fitted out with furniture that has been extensively studied, with student input and student-designed prototypes. The standard student workstation includes a desk and an additional table shared by every two students. With this new, thoughtfully designed building, the School of Architecture is excited about the positive impacts on our graduate program and its studio culture. These are indicated on the plans that follow.

Lee III Pin-Up and Review Spaces. In addition to the presentation and review spaces in Lee I and Lee II, Lee III offers a number of review spaces on its ground floor and the mezzanine, in most cases adjacent to the studio. These are indicated on the plans that follow.

Lee III Seminar Rooms. Lee III added 6 new seminar rooms to those available for architecture classes and presentations.

Lee III Faculty and Administrative Offices. Lee III added 17 new offices for faculty and staff. The renovations to Lee II added another 3 offices. This brings the total number of offices for

architecture faculty and staff in the Lee Hall complex to 29 offices. All regular faculty and full-time senior lecturers have private offices. Lecturers share offices.

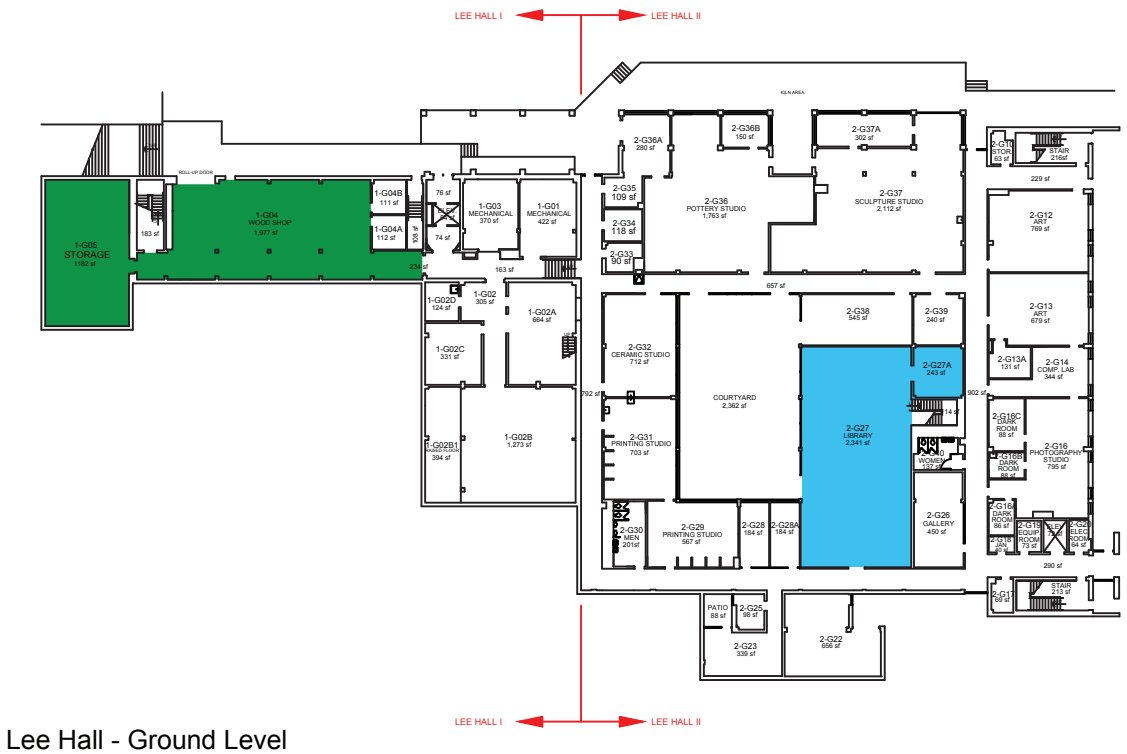
Digital Resources

Clemson University's Computing and Information Technology center (CCIT), http://www.clemson.edu/ccit/, provides and maintains the university's electronic infrastructure. The College of Architecture, Arts & Humanities has three dedicated technicians who are available to assist the School of Architecture's faculty and students with setting up new computers, installing software, network support, print and digital fabrication facilities, and other trouble shooting. CCIT's help desk can be contacted by phone or email and responds quickly with assistance.

Students are required to have their own computer. CCIT supports both PC's and Macs and provides some software through university licenses. CCIT recommends certain laptop computers and there is a Computer Store on campus in the student union. Architecture faculty and students use both PCs and Macs. Full-time, tenure-track faculty are provided with computers, and CCIT provides all faculty with licenses of necessary software. The university provides licenses for some software, now including the full Adobe suite. See http://www.clemson.edu/ccit/software_applications/software/index.html. CCIT provides software training to students and faculty in a wide array of software in the classroom and by webinars. Courses are offered almost every day of the semester in various programs.
All School of Architecture facilities, in Clemson and off-campus, are equipped with wi-fi. Lee Hall also has Ethernet connections for higher speed connections.
CCIT printing and plotting services, located in the Cooper Library, are available to students and faculty for a fee. See http://www.clemson.edu/ccit/atoz/viewServiceOffering.php?serviceID=51 . Within Lee Hall, the Gunnin Architectural Library, has equipment available for checkout. A 14x19 high resolution flatbed scanner, and 8.5x11/11x17 color printers are available in Gunnin for student and faculty use. See "3.I.2.4. Information Resources", for more information about the Gunnin Library.

Lee Hall Building Plans

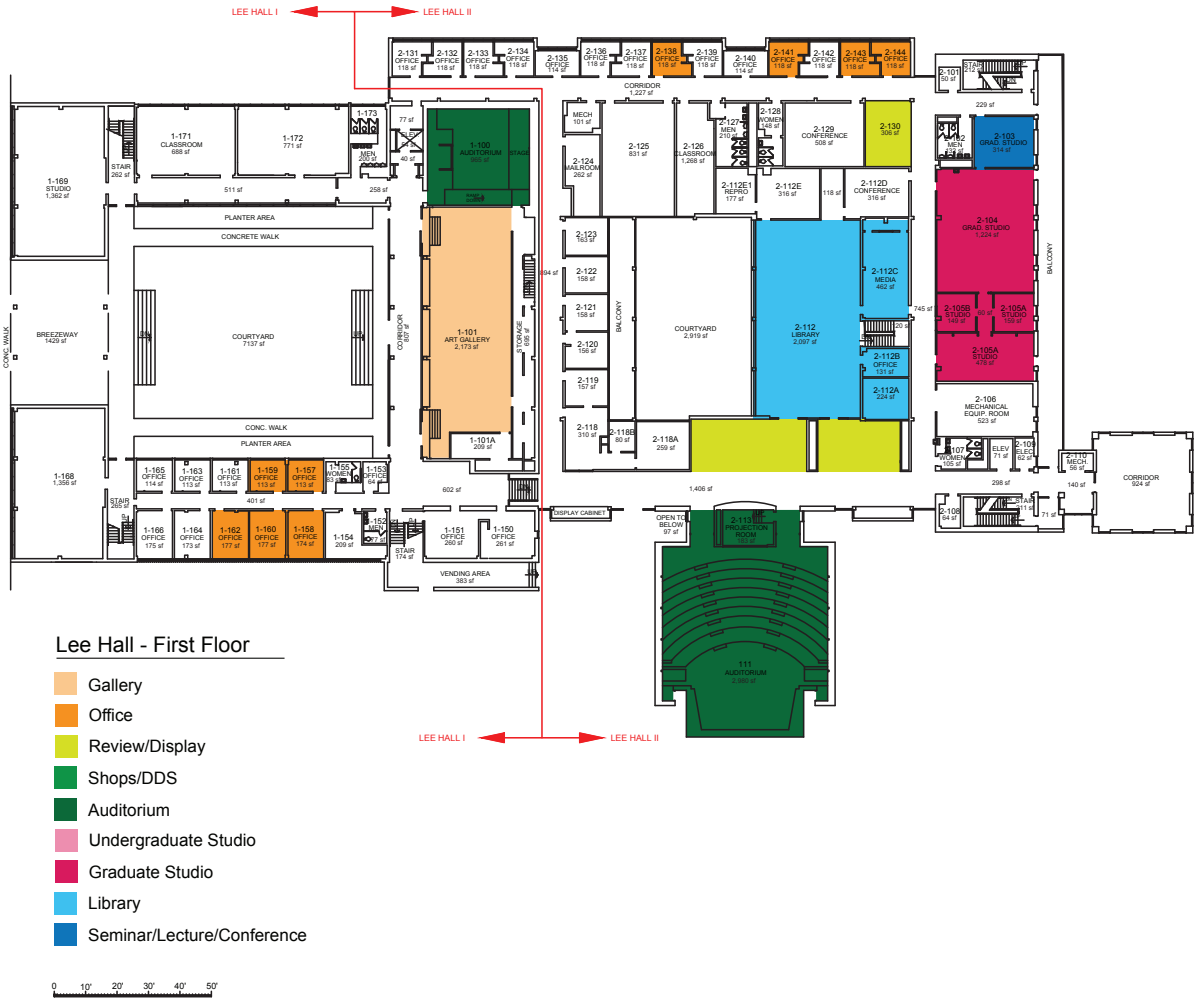
Please see the following pages for plans of the Lee Hall complex.



Lee Hall - Ground Level

- Gallery
- Office
- Review/Display
- Shops/DDS
- Auditorium
- Undergraduate Studio
- Graduate Studio
- Library
- Seminar/Lecture/Conference

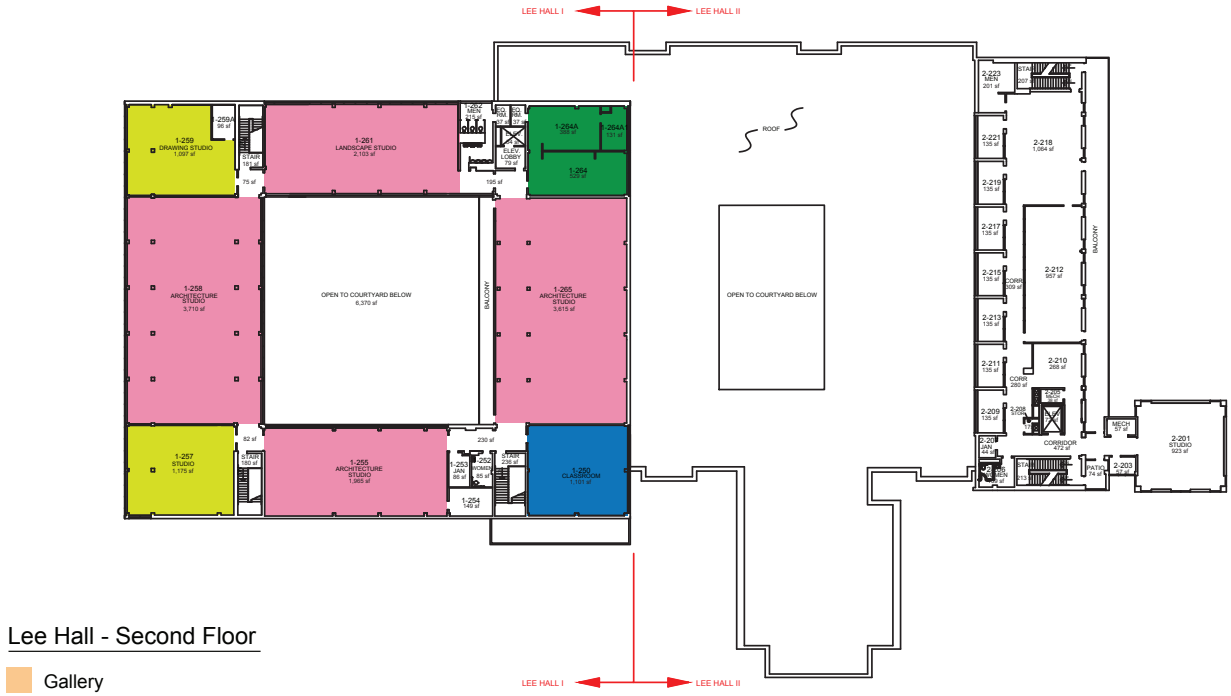
0 10' 20' 30' 40' 50'



Lee Hall - First Floor

- Gallery
- Office
- Review/Display
- Shops/DDS
- Auditorium
- Undergraduate Studio
- Graduate Studio
- Library
- Seminar/Lecture/Conference

0 10' 20' 30' 40' 50'



Lee Hall - Second Floor

- Gallery
- Office
- Review/Display
- Shops/DDS
- Auditorium
- Undergraduate Studio
- Graduate Studio
- Library
- Seminar/Lecture/Conference

0 10' 20' 30' 40' 50'

Lee Hall - Third Floor

- Gallery
- Office
- Review/Display
- Shops/DDS
- Auditorium
- Undergraduate Studio
- Graduate Studio
- Library
- Seminar/Lecture/Conference

Lee Hall - First Floor

- Gallery
- Office
- Review/Display
- Shops/DDS
- Auditorium
- Undergraduate Studio
- Graduate Studio
- Library
- Seminar/Lecture/Conference

0 10' 20' 30' 40' 50'

Lee III, Ground Floor

Lee Hall - Second Floor (Mezzanine)

- Gallery
- Office
- Review/Display
- Shops/DDS
- Auditorium
- Undergraduate Studio
- Graduate Studio
- Library
- Seminar/Lecture/Conference

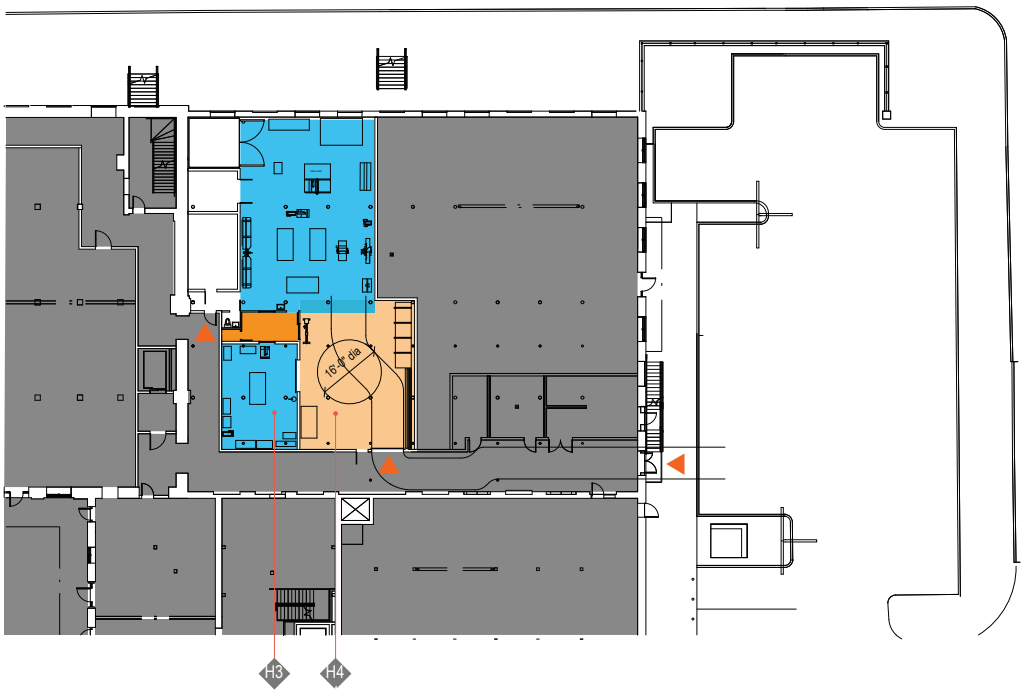
0 10' 20' 30' 40' 50'

Lee III, Floor 1

OFF-CAMPUS STUDY CENTERS

The Clemson Architecture Center in Charleston (CAC.C)
The CAC.C program is housed in the newly created Clemson Design Center in Charleston (CDC.C). The CDC.C will eventually house six programs including the CAC.C, Master of Science in Historic Preservation, Master of Resilient Urban Design, Architecture+Health, Landscape Architecture, and Architecture+CommunityBUILD. Approximately 100 students and 16 faculty and staff will occupy the 25,000 sf space. Equipped with a 100-seat meeting room, state-of-the-art wood and metal shops, four seminar rooms equipped with video conferencing and other audio-visual equipment.

The Cigar Factory building is shared with tech companies, restaurants, retail, architects, engineers and other business uses.



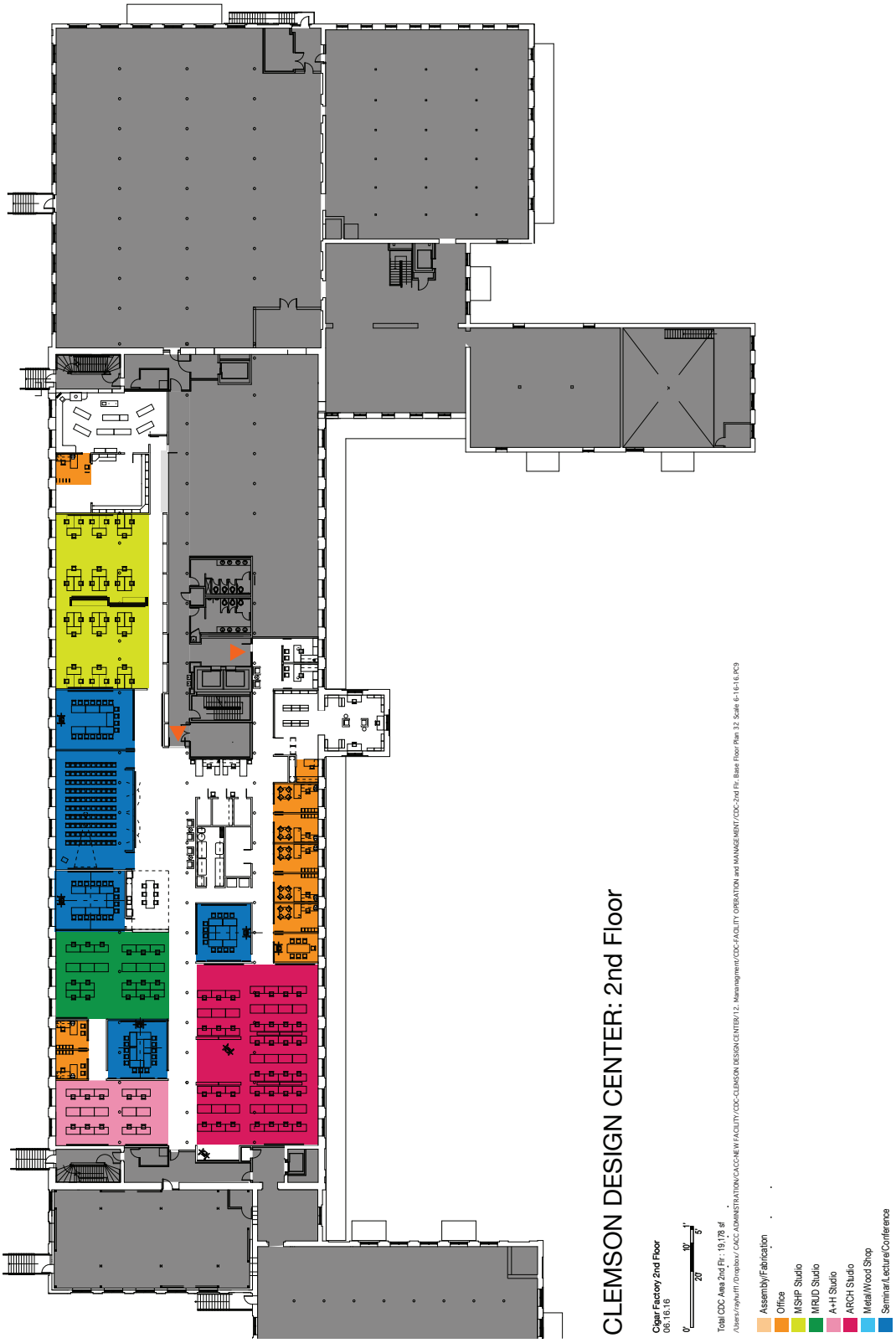
Cigar Factory 1st Floor
01.20.16

0' 10' 1'
20' 5'

Total CDC Area 2nd Flr : 4,000 sf

/Users/rayhuff1/Dropbox/ CACC ADMINISTRATION/CACC-NEW FACILITY/CDC-CLEMSON DESIGN CENTER/12. Mananagment/CDC-FACILITY OPERATION and MANAGEMENT/CDC-1st Flr. Base Floor Plan 32 Scale 6-16-16.PC9

- Assembly/Fabrication
- Office
- MSHP Studio
- MRUD Studio
- A+H Studio
- ARCH Studio
- Metal/Wood Shop
- Seminar/Lecture/Conference


CLEMSON DESIGN CENTER: 2nd Floor
Cigar Factory 2nd Floor
06.16.16
0'
10'
20
40'
80'
Total CDC Area 2nd Flr : 19,178 sf
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Assembly/Fabrication
Office
MSHP Studio
MRUD Studio
A+H Studio
ARCH Studio
Metal/Wood Shop
Seminar/Lecture/Conference

The Barcelona Architecture Center (BAC)

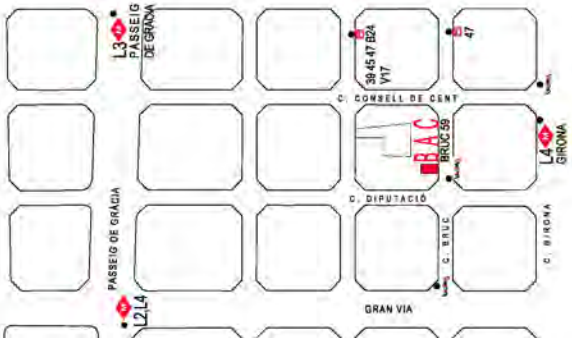
The Barcelona Architecture Center is located in Eixample, a district between the old city and what were once surrounding small towns, constructed in the 19th and early 20th centuries by Ildefons Cerdà. The BAC center accommodates a large flexible space of a total area of 250.00 m², distributed into 150 m² of open working studio space, with natural and artificial lighting, seminar classrooms, individual desks for each student, model room and 100 m² of service spaces, coordination space, small library, Wi-Fi and internal network for 50 students, printers and plotters, storage and bathroom. Students also have access to the library of the College of Architects of Catalonia, one of the largest architectural libraries in Europe.

BAC FACILITIES:

BAC location:

Barcelona Architecture Center
Carrer Bruc 59, Local 1, 08009
Barcelona, Spain,
Tel. (+34) 93 301 61 53,
bacprogram@coac.net

How to arrive:
The nearest metro stations (as indicated on map) are
Girona L4 and Passeig de Gracia L2/ L3/ L4



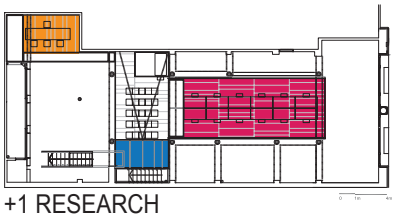
The Barcelona Architecture Center is located in Eixample, a district between the old city and what were once surrounding small towns, constructed in the 19th and early 20th centuries by Ildefons Cerdà. It is only a short walk from La Rambla, the old port and seafront, numerous historical and architectural points of interest, as well as various bus and metro stops, connecting students to all parts of the city.

The BAC facility has a total area of 250.00 m², distributed into 150 m² of open working space, with natural and artificial lighting, with a potential division into two different spaces, Wi-Fi and internal network for 42 students, and 100 m² of service spaces, coordination space, seminar classroom, storage and bathroom.

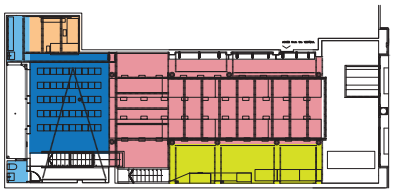
BARCELONA ARCHITECTURE CENTER, CARRER BRUC 59, LOCAL 1, BARCELONA 08009 T/F 933 016 153 bacprogram@coac.cat www.barcelonaarchitecturecenter.wordpress.com

BAC facilities:

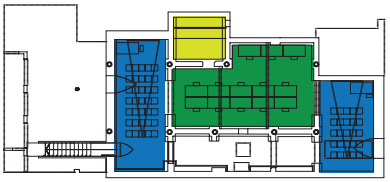
BAC SPACE
Disposes of 250m of open space studio in the centre of Barcelona.



+1 RESEARCH



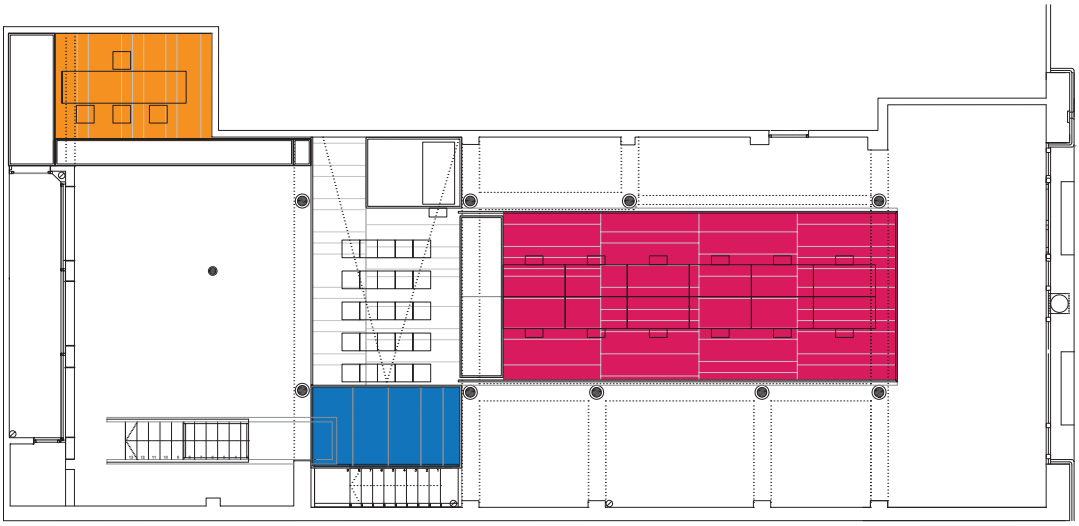
0 STUDIO, SEMINAR



-1 SEMINAR, MODELLING ROOM

- Plotters
- Office
- Storage
- Model Room
- Undergraduate Studio
- Graduate Studio
- Kitchenette/Bathroom
- Seminar/Lecture/Conference/Study

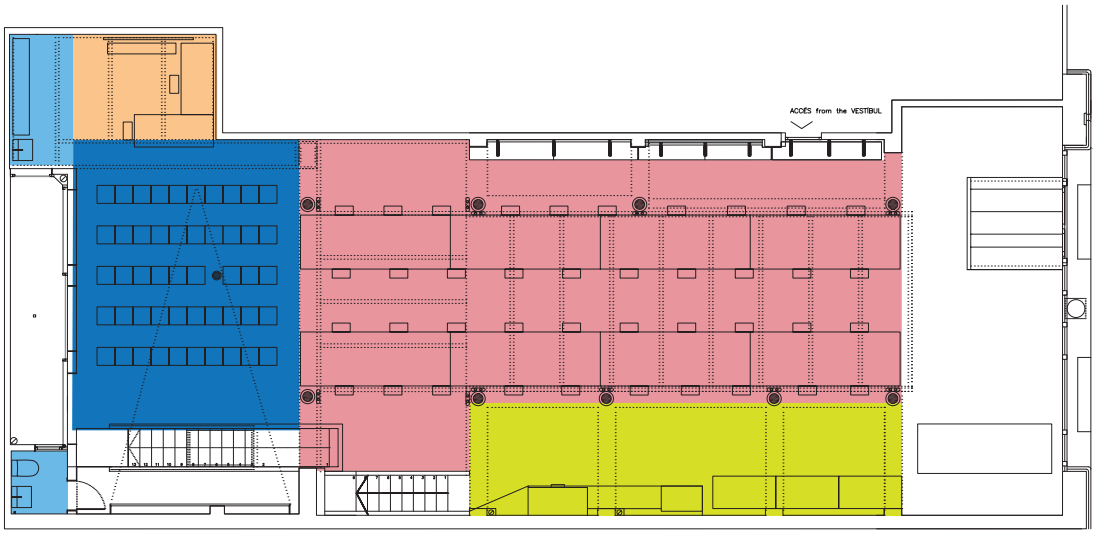
BAC facilities:



+1 RESEARCH
(seminar classroom, graduate students design studio area, program coordination office)

- Plotters
- Office
- Storage
- Model Room
- Undergraduate Studio
- Graduate Studio
- Kitchenette/Bathroom
- Seminar/Lecture/Conference/Study

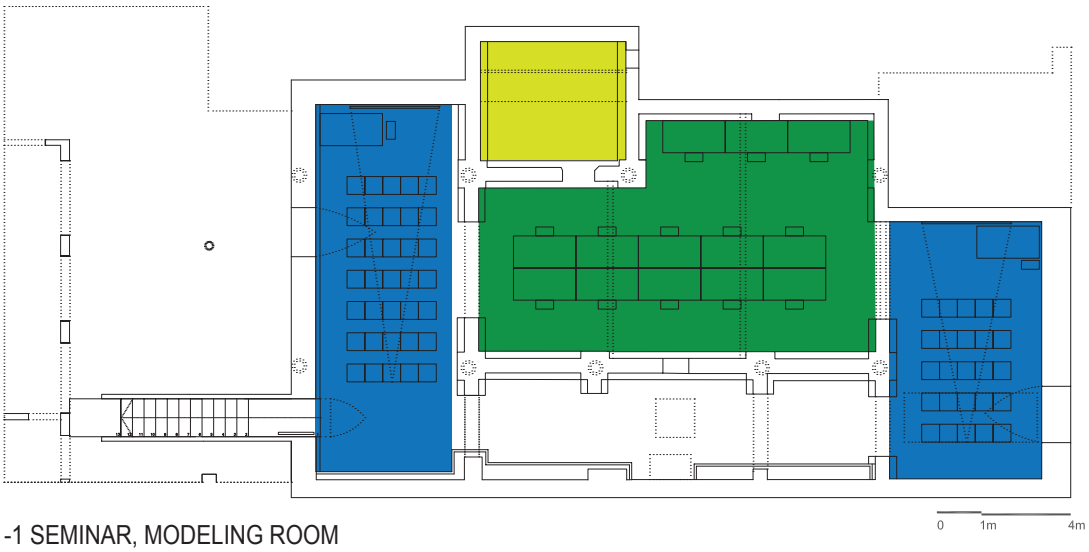
BAC facilities:



0 STUDIO, SEMINAR
(Design Studio area, Seminar classroom, printers/plotters area, students storage closet, kitchenette, bathroom)

- Plotters
- Office
- Storage
- Model Room
- Undergraduate Studio
- Graduate Studio
- Kitchenette/Bathroom
- Seminar/Lecture/Conference/Study

BAC facilities:



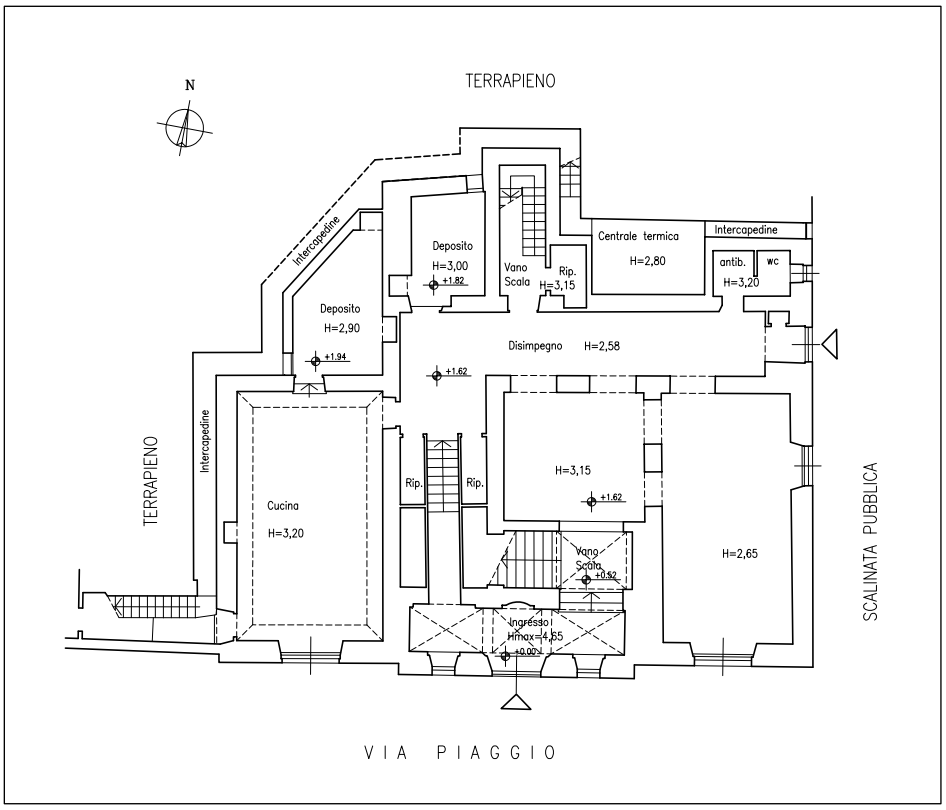
-1 SEMINAR, MODELING ROOM
(seminar classrooms, model room, storage)

- Plotters
- Office`
- Storage
- Model Room
- Undergraduate Studio
- Graduate Studio
- Kitchenette/Bathroom
- Seminar/Lecture/Conference/Study

The Clemson University Charles E. Daniel Center for Building Research and Urban Studies, Genoa, Italy

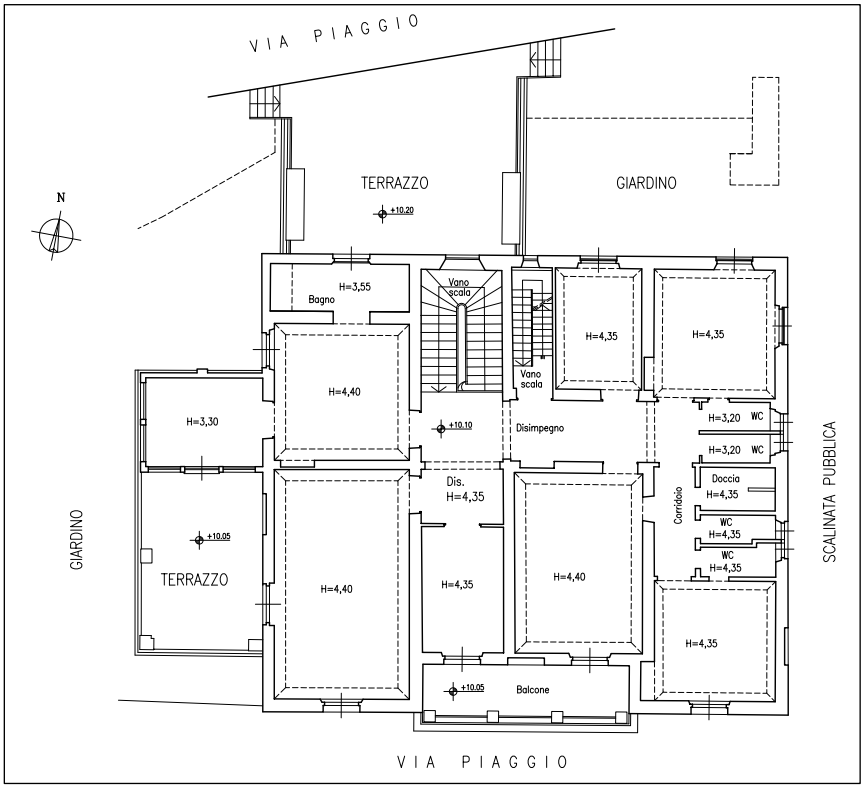
The Daniel Center, known as “the villa”, has been the model for Clemson’s off-campus architectural education for thirty years. Clemson owns a three-floor, nineteenth century villa located at 14 Via Privata Piaggio, in the hills above the old city and port of Genoa. It accommodates the education and residence of twenty students, which includes a mix of undergraduate and graduate architecture and landscape architecture students, the administrative director, staff, and a professor-in-residence from the Clemson faculty.

The lowest level (Piano Terra) of the villa is occupied by the dining room, a student lounge, kitchen, pantry, garage/storage/laundry. The mid-level (Piano Primo) contains the academic spaces including studios, library and seminar room. The apartment for the professor-in-residence is also on this level, along with the administrative director’s office. The upper level (Piano Secondo) is the student residential level, with shared sleeping rooms and restrooms, and a private “patron’s suite” available for short-term stays of parents and friends.



Piano Terra

Piano Primo



Piano Secondo

History of Off-Campus Enrollments, illustrating facility use

The off-campus centers have been historically necessary to not only accommodate pedagogical aspirations, but to provide adequate space for the school's programs. Concurrent with the addition of the studio space in Lee 3 in January 2012, the Architecture and Landscape Architecture also experienced a post-recession decline in overall enrollments, particularly in the undergraduate program, (as did many of our peer programs). Consequently, the student census in off-campus center declined from 102 in 2012/13 to 83 in 2016/17. Undergraduate total enrollment numbers are up, graduate numbers are steady, and the S17 and F17 off-campus enrollment numbers are showing a significant rebound. Students have already stated their preferences, been assigned, and in some cases paid deposits for these upcoming semesters off-campus.

		F12	S13	AY12/13	F13	S14	AY13/14	F14	S15	AY14/15	F15	S16	AY15/16	F16	S17 (Projected)	AY16/17	F17 (Projected)
Genoa	BA	20	9	29	12	9	21	11	10	21	7	12	19	5	0	5	6
	M.Arch	1	4	5	5	5	10		1	1	3	1	4	3	14	17	7
	LARCH		1	1		3	3	1	6	7	2	2	4	0	2	2	0
	Other	2		2			0		1	1	1		1			0	
	Total	**23**	**14**	**37**	**17**	**17**	**34**	**12**	**18**	**30**	**13**	**15**	**28**	**8**	**16**	**24**	**13**
Barcelona	BA	14	6	20		9	9	9	8	17	6	4	10	4	9	13	17
	M.Arch		3	3		2	2		3	3	1	4	5	5	5	10	0
	LARCH		8	8	4	5	9	4	5	9	6	5	11	0	4	4	0
	Other	5		5	4		4	1		1			0			0	
	Total	**19**	**17**	**36**	**8**	**16**	**24**	**14**	**16**	**30**	**13**	**13**	**26**	**9**	**18**	**27**	**17**
Charleston	BA	19		19	4	5	9	7	8	15	1	15	16	2	13	15	8
(+Irvine F15 only)	M.Arch		14	14	6	5	11	15	3	18	18	0	18	9	2	11	15
	LARCH	1	2	3		5	5		4	4		2	2	0	6	6	0
	Other		5	5			0			0			0			0	
	Total	**20**	**21**	**41**	**10**	**15**	**25**	**22**	**15**	**37**	**19**	**17**	**36**	**11**	**21**	**32**	**23**
Total Off-campus	BA	53	15	68	16	23	39	27	26	53	14	31	45	11	22	33	31
	M.Arch	1	21	22	11	12	23	15	7	22	22	5	27	17	21	38	22
	LARCH	1	11	12	4	13	17	5	15	20	8	9	17	0	12	12	0
	Other			0			0			0			0			0	
	Total	**55**	**47**	**102**	**31**	**48**	**79**	**47**	**48**	**95**	**44**	**45**	**89**	**28**	**55**	**83**	**53**

I.2.3 Financial Resources

Description of the institutional process for allocating financial resources

Budgets are determined and distributed from the university's Office of the VP for Finance and Operations to the colleges, and from the colleges to the departments/schools. The university's budgeting system is more of a "block budgeting" or incremental budgeting system than a RCM model, but in order to incentive revenue production, the university is adopting some RCM practices within the incremental model.

The school's budget allocation from the college remains much the same each year. Areas for negotiation include the amount of salary the school is allocated for each new hire when a faculty line opens due to a retirement or departure. The college's policy is for all open lines to revert to the college, but the college has been generous with the school as it has replaced departing senior faculty members.

The school's director and fiscal analyst regularly meet with the dean and the college's manager of the business office, to review fiscal performance and present resource plans and proposals. Within the school, the budget center directors work with the school director and fiscal analyst to establish budgets and track performance.

Description of the program's current financial resources

The School of Architecture consists of five departments:

- School of Architecture – Dept #0503
- Center for Health Facilities Design and Testing – Dept #0513
- Institute for Intelligent Materials, Systems & Environments – Dept #0515
- Community Research & Design Center– Dept #0536
- Off-Campus Centers – Dept #0590

Each department has their own set of accounts and monthly budget reports that have to be reconciled and signed off on by the Budget Center Director.

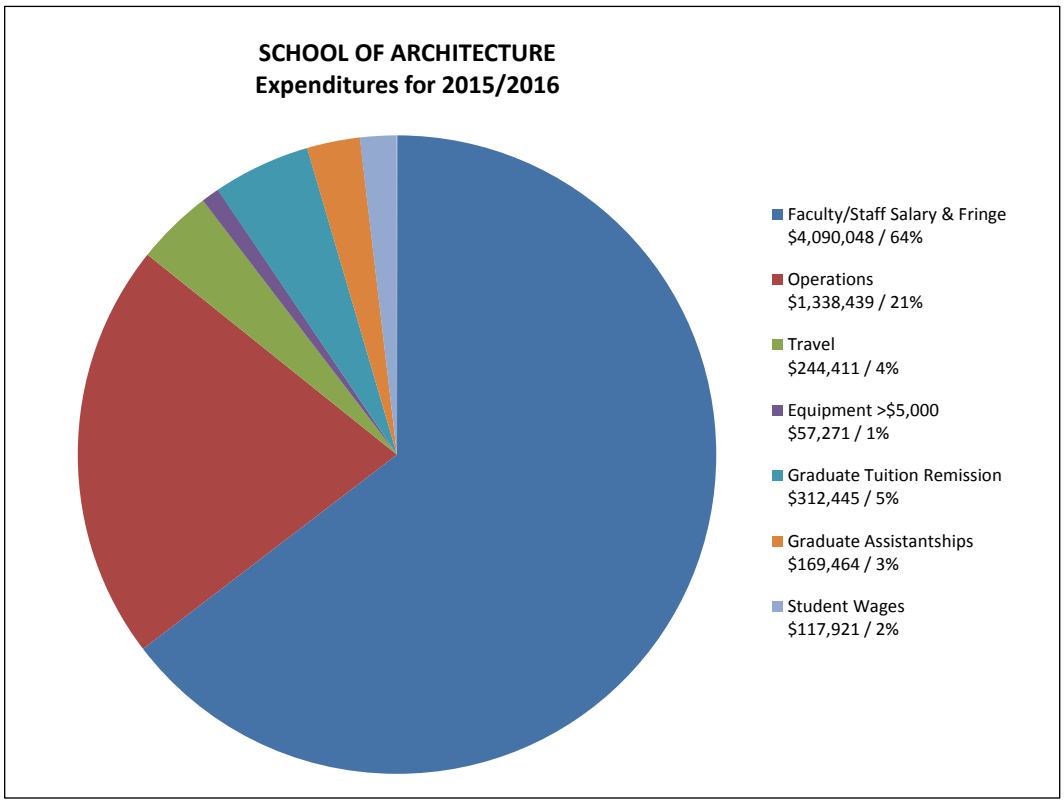
The accredited programs have adequate financial resources. Last year, 2015/2016, the combined budget for all five departments of the School of Architecture was $7,395,616. Our expenditures totaled $6,330,000, or 86% of our budget. The 14% remaining balance consisted mostly of foundation funds, sponsored grants, and self-generated revenue which carries forward from one year to the next. These amounts do not do not include revenue and expenses for our Centers in Genoa and Barcelona. Those two programs are funded through student tuition and student fees; all the related financial transactions are handled by the Office of Global Engagement. These amounts also do not include our endowments that are solely for student aid. Each year we have around $300,000 to give out to our undergraduate and graduate Architecture students in the form of scholarships, fellowships, and travel grants-in-aid.

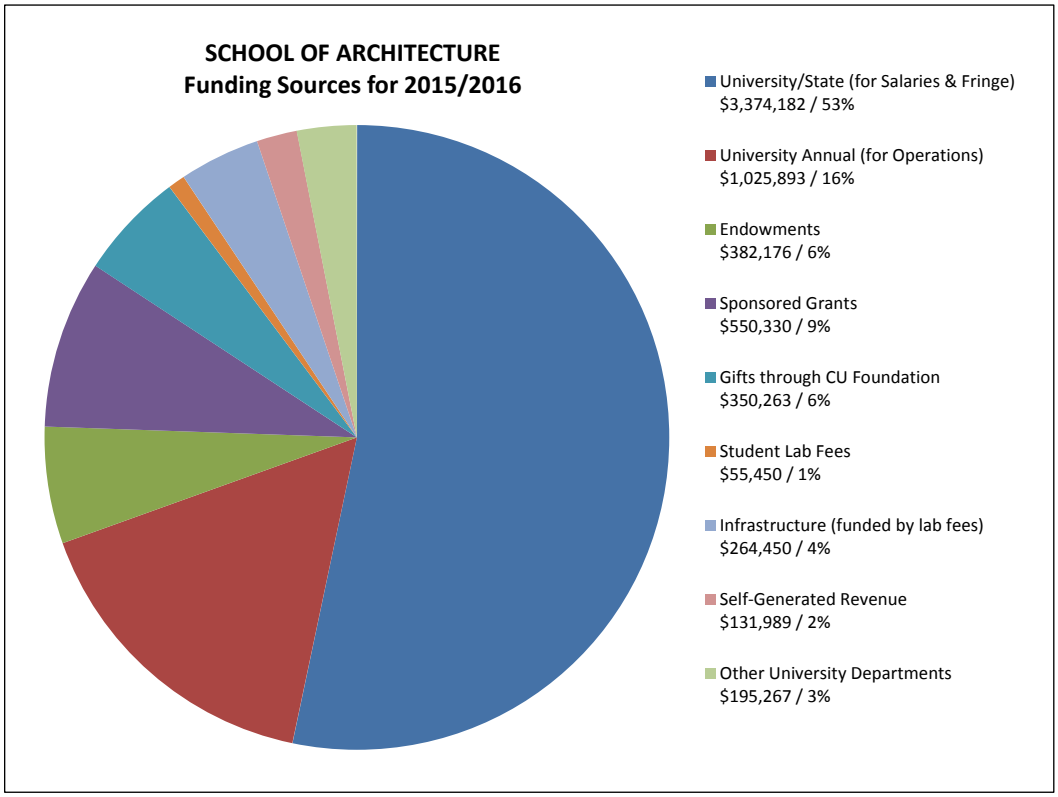
Sources/Types of Funding

1) Annual university/state funds
    a) The school receives enough funds from the university/state to cover faculty and staff salaries and the related fringe costs. The rest of our operating budget including our budget of $72,000 for grad assistantships was cut during the University-wide budget cuts over the past five years. Several years ago we also lost our annual $250,000 McMahan gift after the death of Richard McMahan. To compensate for the loss of this gift, VP of Finance and Operations Brett Dalton agreed to give $250,000 annually to the School of Architecture. This entire 250K is now used as our operating budget. Examples of items paid by these funds: phone bill, office supplies, student wages, postage, guest critic travel and honorariums, printing, advertising, computer equipments, and faculty search expenses.
    b) The school was able to increase its operating budget by a recent switch from tier 2 to tier 1 graduate tuition. With this added revenue we are able to fully fund our annual 72K budget for

graduate assistantships as well as our annual support of the PDBE program. (FY16 tuition tier 1 revenue was $118,424)

2) Endowments
   a) All spending must be in direct line with the fund agreement established by the donor at the time the gift was made.
   b) A budget is set up each year by Related Organizations based on the average of past three year's performance. At the end of each year, any amount of the budget we didn't use goes into the endowment Spending Balance (a type of holding account). In any certain year, if the yearly budget is not adequate and there are funds available in this Spending Balance account, funds can be withdrawn from it and used to supplement the budget for that year.
3) Sponsored Grants
   a) All spending must be in direct line with the contract signed by the sponsor. Any deviation greater than 10% of the total budget amount needs written approval from the sponsor.
   b) Most sponsored grants have a Facilities and Administrative fee that is charged by and collected by the University Grants and Contracts Office. This fee depends on the type of grant and the sponsor, but it may range from 20-45% of the grant amount. Approx. 40% of this fee is eventually returned to the College in the form of Incentive Funds, of which the College keeps 25% and gives 25% to the School and 50% to the Principal Investigator of the Grant. For example, if you have a grant of $150,000 and the F&A amount collected is $42,800, over the life of the grant you as the Principal Investigator should receive around $8,560 in Incentive funds and the department would receive $4,280.
4) Gifts through the Foundation
   a) These gifts may be designated for a specific program or project, or they may be general gifts to the School for the Director to allocate as determined. In order to be considered a gift, the funds must be unrestricted with no contract or deliverable specified by the donor.
   b) The CU Development Office charges a 5% fee on all gifts.
   c) Gifts are the only type of funding that can be used for business meals, faculty retreats, retirement receptions, etc.
5) Student lab fees
   a) Architecture students pay a $200 fee for each lab in which they are enrolled, and we receive half of each lab fee. All lab fee funds must be used in a way that directly benefits the students. We currently use most of these funds to pay for items related to operating the Digital Design Shop and the Materials Lab, including paying part of the DDS Shop Manager's salary and fringe costs.
6) Lab/Class Infrastructure Funds
   a) The other half of the lab fees paid by our students is collected by the Provost. We usually have the opportunity to get some or all of these lab fees back in the form of Infrastructure funding. Each Spring the Provost puts out a call for Infrastructure funding requests; we've had a good track record with getting our requests approved. The majority of our funded requests have been for upgrades to the Digital Design Shop and Materials Lab.
7) Self-Generated Revenue
   a) Most self-generated revenue is collected and used for a specific purpose. Examples of this type of revenue include collections from students to pay for a field trip or class materials, summer courses, and our Spring career fair where we charge a registration fee. Any leftover funds can be carried forward from one year to the next.
   b) Incentive funds (which are the kickbacks from Sponsored Grants). These are typically used for professional development travel, books, office equipment, summer salary. They can't be used for anything personal.
8) Funds via internal grants and/or project funding from the College or other departments on campus
   a) AAH Faculty or Student Research Grants given through Associate Dean's office
   b) Creative Inquiry funding, which must be used specifically for class. Anyone who teaches a studio is qualified to apply for these funds.
   c) Collaborative projects with other departments on campus.


SCHOOL OF ARCHITECTURE
Expenditures for 2015/2016
Faculty/Staff Salary & Fringe
$4,090,048 / 64%
Operations
$1,338,439 / 21%
Travel
$244,411 / 4%
Equipment >$5,000
$57,271 / 1%
Graduate Tuition Remission
$312,445 / 5%
Graduate Assistantships
$169,464 / 3%
Student Wages
$117,921 / 2%


SCHOOL OF ARCHITECTURE
Funding Sources for 2015/2016
University/State (for Salaries & Fringe)
$3,374,182 / 53%
University Annual (for Operations)
$1,025,893 / 16%
Endowments
$382,176 / 6%
Sponsored Grants
$550,330 / 9%
Gifts through CU Foundation
$350,263 / 6%
Student Lab Fees
$55,450 / 1%
Infrastructure (funded by lab fees)
$264,450 / 4%
Self-Generated Revenue
$131,989 / 2%
Other University Departments
$195,267 / 3%

Notes for charts above:

- University Annual (for operations) = includes budget for CAC, CRDC, Graduate Tuition Remission (GADs), McMahan replacement, tuition tier 1 revenue
- Self-Generated Revenue = Miscellaneous, Summer Courses, Career Fair, Incentives
- Other University Departments = Campus Planning, PDBE, Cost Share, Creative Inquiry, Faculty Summer Institute, AAH Small Grant, Creativity Professorship, Haworth project

Changes since the previous visit

Between FY 2012 and 2015, the school had to administer a 13.82% reduction of our state budget allocation. These university-wide budget reductions were used as divestments to invest in other areas, i.e., they were budget reallocations. In Architecture's case, as in most, those reallocations were used to increase faculty salaries to bring them in line with peer average salaries.

While these reductions were beginning, the school also suffered the loss of the McMahon annual gift of $250,000 per year. The university's VP for finance reallocated a permanent new university allocation of that amount, because the school could not operate without it. The school identified other "low-hanging fruit" for additional revenues, which have included a change from Tier II to Tier I tuition for our graduate program (and that tuition differential coming to the school). The school was able to do this without negatively impacting applications and admissions partly because our graduate tuition rates for resident and non-resident students remain very competitive, in the bottom quartile as compared to peers. Other revenue producers include an increase in lab fees to the maximum of $200 per studio, and the school's regular successful proposals for university-wide infrastructure funds, (which are funded by 50% of the collected lab fees from across the university). Increased sponsored funding, industry partnerships and development funds, endowment proceeds and annual gifts have also contributed greatly to the school's fiscal position, and its ability to support faculty and students.

The school, with the help of the dean's office, CAF staff and CUF, has discovered and reassigned endowments, and has realigned the language and the use of endowments to better support/retain students and faculty, and graduate fellowships that are used as powerful recruiting tools. The school's director has spent much more time on "friend-raising" and fund-raising, as have some of the program directors. The CAF has been realigned and restaffed to be more connected to the school, that and a new development director with the CUF (Clemson University Foundation) with responsibilities to Architecture, have greatly contributed to private and alumni support. The School has become increasingly entrepreneurial and independent, and could not function as it does without foundation funds, sponsored grants and other self-generated revenues.

In FY 2012, the School of Architecture had total expenditures, (excluding sponsored grants, and endowments for the sole purpose of students scholarships, fellowships and travel grants-in-aid), of $3.7M. In the most recent fiscal year, those expenditures had increased 56% to almost $5.8M.

School of Architecture FY12-FY16 Comparison of Budget and Expenditures
All Funding Sources Excluding Sponsored Grants
(A more detailed comparison of each year since FY12 is included in Section 4)

		FY2012 2011/2012		**FY2016** 2015/2016	
		Budget	**Expended**	**Budget**	**Expended**
UCLASS	Unclassified Salaries	1,783,906.65	1,838,485.25	2,873,736.41	2,746,000.14
CLASS	Classified Salaries	137,937.00	151,227.64	274,694.54	274,055.73
GRAD	Graduate Assistantships	133,254.00	120,050.00	166,962.87	126,934.39
WAGES	Student Wages	45,133.29	41,413.19	110,326.45	83,318.44
FRINGE	Employer Fringe Benefits	526,022.58	521,294.74	879,898.66	924,312.01
INSGAD	Grad Tuition Rem (univ)	206,418.74	206,418.74	288,069.93	288,069.93
DEPGAD	Grad Tuition Rem (dept)	0.00	0.00	30,320.00	17,088.77
EQUIP	Equipment >$5,000	0.00	0.00	26,857.07	26,751.07
OTHER	Operating Expenses	872,462.75	698,224.85	1,625,392.64	1,062,692.10
TRAVEL	Faculty & Student Travel	157,784.97	115,678.54	288,349.50	227,588.30
	Totals	3,862,919.98	3,692,792.95	6,564,608.07	5,776,810.88

Pending reductions, increases, changes and concerns

The College of AAH has been operating each year at a deficit, as it has had to provide more general education courses to a growing university student population, without any budget increases for the increased load. Each year the university has “backfilled” the budget deficit, but there have been weeks of problematic access to funds for all units due to deficit accounts. The provost has recently agreed with the dean to reallocate all of the college’s previous 13.82% budget reduction, (plus some interest). This is great news for the college, but the School of Architecture reminds the dean and college that each of the departments contributed to that reduction, not all of it for the purpose of general education. The dean and business manager have been working on the FY17 allocation of these recovered funds. Most, if not all, will likely go to cover the general education deficit.

Any additional revenues that may come Architecture’s direction will be used to support the following:

- In order to compete for the best students, the school needs to provide more graduate student support, in assistantships, tuition remission and fellowships.
- In order to compete for the best faculty, the school needs to offer more competitive compensation. There is significant salary compression now that the university has moved to the top tier of the Carnegie peers.
- In order to expand the school’s contributions to the university’s rising expecations for research, the average heavy teaching loads of architecture faculty will need to be reduced, and the research infrastructure (staff, post-docs) needs to be strengthened.

There has been ongoing discussion about the possibility of the M.Arch, a high-demand, high-performing program, charging a differential tuition to its students. The school is willing to consider this change, but asserts that there needs to be a serious market study completed to argue for or against any tuition change, and that any additional revenues should come back into the program.

The school is supporting all of its fabrication equipment purchasing and maintenance, and much of the salaries of fabrication personnel with lab fees, which are currently at the maximum per studio. Students

are not assessed any additional fees for the use of this equipment. Other disciplines, (Landscape Architecture, Art and others), also use the facilities, without fees, and without contributing any of their lab fees. The school needs to examine other funding and operations models to not only sustain but grow its fabrication capacity.

The current dean has done much to try to regularize the timing and actuality of the distribution of the school's share of lab fees, summer school revenues, and other 14-accounts. The school hopes these trends continue.

The school will have a new endowed named professorship (McCall) available in FY17 or FY18, to add to the existing endowed named professorship (Robert Mills) and the two endowed chairs (Spartanburg and Mickel). These are important assets to attract and retain high-performing faculty.

I.2.4 Information Resources

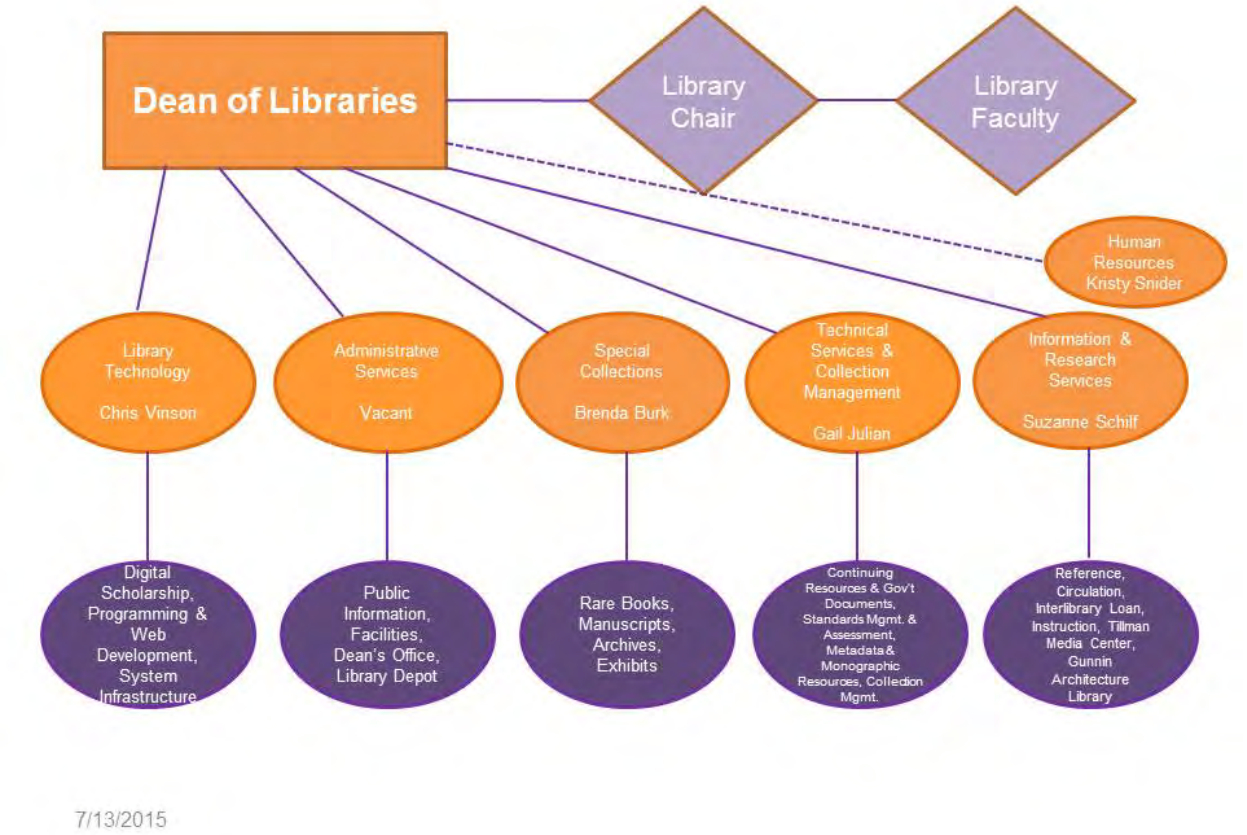
Institutional Context
Students, faculty, and staff of the School of Architecture have at their disposal all the resources, services, and research support of Clemson University Libraries (CUL), with the added advantage of the art & design-specific 'embedded' services and resources of the Emery A. Gunnin Architecture Library (Lee Hall) and the Clemson Design Center Library (CDCL) in Charleston.

Clemson University Libraries are administered as a college, with a dean, faculty librarians, and a faculty chair. The Libraries employ 28 faculty, 62 staff, and 76 student assistants.

CUL Budget
- Total library expenditures of $13,781,574 (approximately $700 per student).
- $5.8 million for electronic databases and journals
- $352,000 for print periodicals
- $603,525 for books (including electronic books) and media

CUL Collections
- 1.6 million print volumes
- 412,000 eBooks
- 65,878 eJournals
- 490 databases
- 1,094,576 microforms
- 165,923 audio/visuals
- 10,956 downloadable units (audio, video)

Clemson University Libraries is a member of the Association of Southeastern Research Libraries (ASERL) and the Partnership Among South Carolina Academic Libraries (PASCAL). PASCAL and interlibrary loan services (via ILLIAD) extend the breadth and reach of Clemson users' resource access to encompass the state, the nation, and cooperating international institutions.



Emery A. Gunnin Architecture Library Context

The Gunnin Library is a branch of the CUL centrally located in Lee Hall and staffed by one tenured faculty librarian, two classified employees (Library Manager I and Library Specialist), and 7 student assistants (~10 hours/week). The Gunnin's Library Manager I also supervises a half-time Library Specialist at the CDCL, who handles circulation, stacks management, and on-site reference and services there.

The Gunnin's faculty librarian is responsible for reference and research support, information literacy instruction, collection development, and the creation and maintenance of research guides in these subject liaison areas: art, architecture, landscape architecture, construction science and management, city and regional planning, real estate development, historic preservation, and digital production arts. She is also responsible for collection development and reference and research support for the CDCL, and maintains the Gunnin Architecture Library web page. Staff members are responsible for circulation, stacks management, student and faculty services, library statistics, and the library's working budget (supplies, student assistantships, etc.). Both the faculty librarian and the Library Manager I report to the CUL's Head of Information & Research Services.

The Gunnin Library's operating hours are Monday through Thursday, 7:30 a.m. - 10 p.m.; Friday, 7:30 a.m. - 5:00 p.m.; and Sunday, 2:00 p.m. - 10 p.m.

Allocated funds for Gunnin/CDCL resources for teaching & learning:

- ~$15-18,000 per year for all Gunnin-covered subject areas, from the Libraries general acquisition budget

- An additional $25,000 per year from the South Carolina Board of Architecture Examiners, strictly for library materials and resources in direct support of architecture, sustainable building design, and the urban built environment. (These funds are formally requested and reviewed annually.)
- Subscriptions to some electronic resources (Avery Index to Architectural Periodicals, e.g.) are paid for out of the Libraries' e-resources core funds.

Total Gunnin/CDCL holdings: 60,771 items
[Gunnin: 38,100 + CDCL: 3081 + ARCH Remote (24-hr retrieval): 19,590]

Total NAs: 21,334 (monographs + media)
[Gunnin: 12,897 + CDCL: 1496 + Remote storage: 5331 + Robert M. Cooper Library (Main)/Cooper Remote storage: 1610]

Gunnin formats and sub-collections, all subjects: (Gunnin/CDCL)
Circulating volumes (monographs, bound journals): 53,844
Maps: 38
CDs/DVDs (1243/63) : 1306
Streaming video titles: 49
VHS: 291 (phasing out)
Print journal subscriptions (108/4) : 112
Single-seat site licenses: 2 (AIA Contract Docs, Architectural Graphic Standards)
Reference (1494/60) : 1554
Rare books: 746
Folios: 80

Principal Gunnin/CDCL subject areas:
Architecture, all aspects + Healthcare facilities design
Art: Visual arts & collections, Sculpture, Drawing, Painting, Print media, Craft & design, Decorative arts, Arts in general (lives of artists, etc.)
Urban history, urban studies, and urban design
Historic preservation
Photography
Building construction
Landscape architecture
Museum studies

Equipment available for checkout:
292 pieces of circulating equipment (SLR and video cameras, floodlamps, surveying equipment, extension cords, computer cables, LED projectors)
14x19 high resolution flatbed scanner with scan-to-email/USB functions
8.5x11/11x17 color printer connected to university-wide printing network

Access to additional resources:
ILLIAD
PASCAL (acquisitions and access partnership)
Carolina Consortium (acquisitions partnership)
TigerPrints: Clemson's institutional repository for students' theses, dissertations, and terminal projects, as well as for faculty publications and other university-affiliated research output.

Principal databases: [for all, refer to CUL's Databases A-Z list]
Academic Search Complete
Avery Index to Architectural Periodicals
Art Full Text
Art Index Retrospective

ARTstor Digital Library
BuildingGreen
Design & Applied Arts
Oxford Art Online
Urban Studies Abstracts
Kanopy streaming video (Michael Blackwood Productions documentaries + titles requested by faculty)

Comments
Apart from relieving the perennial shortage of funds (that most academic libraries experience), the one thing that could most improve the effectiveness of the Gunnin Library would be a closer partnership between architecture faculty and the librarian, in the form of integrating the development of student's information-seeking and library-use skills into studio and course assignments. This level of engagement with available resources is an educational goal worthy of attention and effort.

The primary hindrance to improving collections and services in support of architecture boils down to funds, whether for resources, personnel, or facilities. A wish-list of additions to the Gunnin Library's resources and/or expanded services would include:

- An expanded visual resources collection, to include a 'case studies' collection of building construction drawings (print medium as well as 'born digital') of significant architectural projects around the state. At present, the CUL's architectural drawings holdings are in Special Collections and housed in a remote storage facility 8 miles from campus, viewable only on-site and by appointment.
- Conservation assessment, applied conservation, and archival-standard shelving for the 700+ items in the Gunnin Library's rare books collection. The CUL lacks funds for this; the Gunnin librarian is investigating appropriate outside grants and potential benefactors.
- The prospect of a materials collection has been raised multiple times, by the librarian and by instructors in Architecture and Landscape Architecture, but overall there is insufficient momentum (and funding) to overcome the challenges to creating such a resource: assigned personnel, allocated and properly organized space, implementation of cataloging and materials in-processing system and protocols.
- Expanded streaming video offerings. The present Kanopy platform subscription, originally funded by a $5,000 bump-up in funds from the South Carolina Board of Architectural Examiners(2014), will expire at the beginning of 2017—and with it our access (at Clemson as well as in Charleston and Genoa) to several dozen Michael Blackwood documentaries on modern and contemporary architects. The Gunnin librarian will request funds from the SCBAE to renew this subscription in 2017 if usage statistics indicate the need.

I.2.5 Administrative Structure & Governance

Administrative Structure
The administrative organization in the School of Architecture is a representative structure carried throughout the University. Each Department Chair/Director of the University represents a constituency of students, staff and faculty. The Director of the School of Architecture is an advocate and representative for the School in the open forum of bi-weekly joint meetings with the Dean and all the Chairs in the College of Architecture, Arts & Humanities, and the monthly meetings of the OADC, the Organization of Academic Department Chairs.

The School's administration is led by a Director/chair who reports directly to the Dean. Director Kate Schwennsen, FAIA, serves as the primary administrator of the School of Architecture. (75% administrative responsibilities and 25% other teaching responsibilities.) She teaches one 3-credit course per year. The Director has a 9-month faculty appointment with an administrative supplement, and a full-time summer administrative appointment.

The Director appoints other faculty to partial administrative duties including the Associate Chair, Director of Graduate Studies, Director of Undergraduate Programs, Director of the Architecture + Health Program, Directors of certificate programs, centers and institutes, and directors and resident professors in off-campus centers. Clemson-based administrative appointments below are supported by a 9-month salary supplement, a small summer salary supplement, and a course release. (Staff who report to and support the administrators and programs are listed in I.2.1 above.)

- Associate Chair (Associate Professor Ulrike Heine) assists the Director and also coordinates off-campus programs. 20% administrative responsibilities.
- Director of Graduate Studies (Associate Professor Peter Laurence) coordinates academic and advisement affairs for the Master of Architecture degree program. 20% administrative responsibilities.
- Director of Architecture and Health Program (Professor David Allison) coordinates the Architecture and Health graduate program. 20% administrative responsibilities.
- Director of Undergraduate Programs (Associate Professor Tim Brown) coordinates academic and advisement affairs for the pre-professional BA degree program.

Clemson-based Center Directors with administrative responsibilities are:
- Director, Center for Health Facilities Design & Testing and Spartanburg Regional Health System Endowed Chair in Architecture + Health Design (Dr. Anjali Joseph) who directs the CHFDT's research programs, faculty, staff and students.
- Director, Community Research + Design Center (Associate Professor Dan Harding) who also leads the Architecture + CommunityBUILD graduate certificate program.
- Director, Clemson University Institute for Intelligent Materials, systems & Environments (until July 1 2016 was Dr. Keith Green, a search for a replacement will be underway).

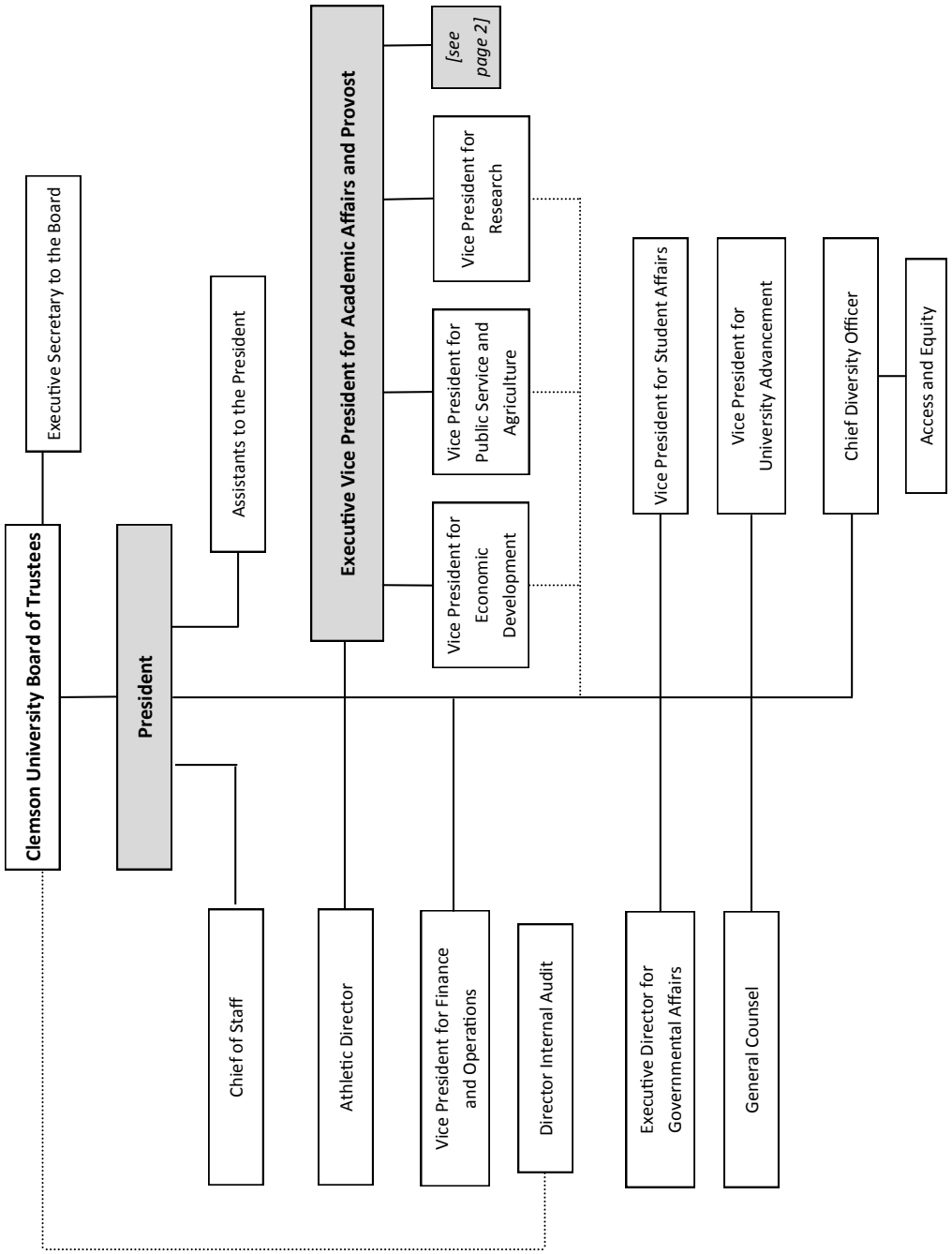
Off-campus faculty with administrative appointments include:
- Director of the Clemson Architecture Center in Charleston (Associate Professor Raymond Huff, FAIA) directs the program located in Charleston, South Carolina. 50% administrative responsibilities and 50% teaching responsibilities.
- Faculty in Residence of the Genoa Program (varies) directs the program located in Genoa, Italy. 25% administrative responsibilities and 75% teaching responsibilities.
- Adjunct Faculty Miguel Roldan is the Director of the Barcelona Architecture Center, the provider and host of Clemson's Barcelona program.

At the time of writing this report, there are actions taking place to move the Graduate Program in Historic Preservation from the Department of Planning, Development and Preservation to the School of Architecture. This change makes great sense practically and pedagogically as the architecture and preservation programs for the first time occupy shared space in the new Clemson Design Center in Charleston. The historic preservation program is a joint program between Clemson University and the College of Charleston. There are only 2 regular faculty members, a tenured full professor who is also the program director and a tenure-track assistant professor. When this change is approved, the school's policies, practices and org charts will need to be amended.

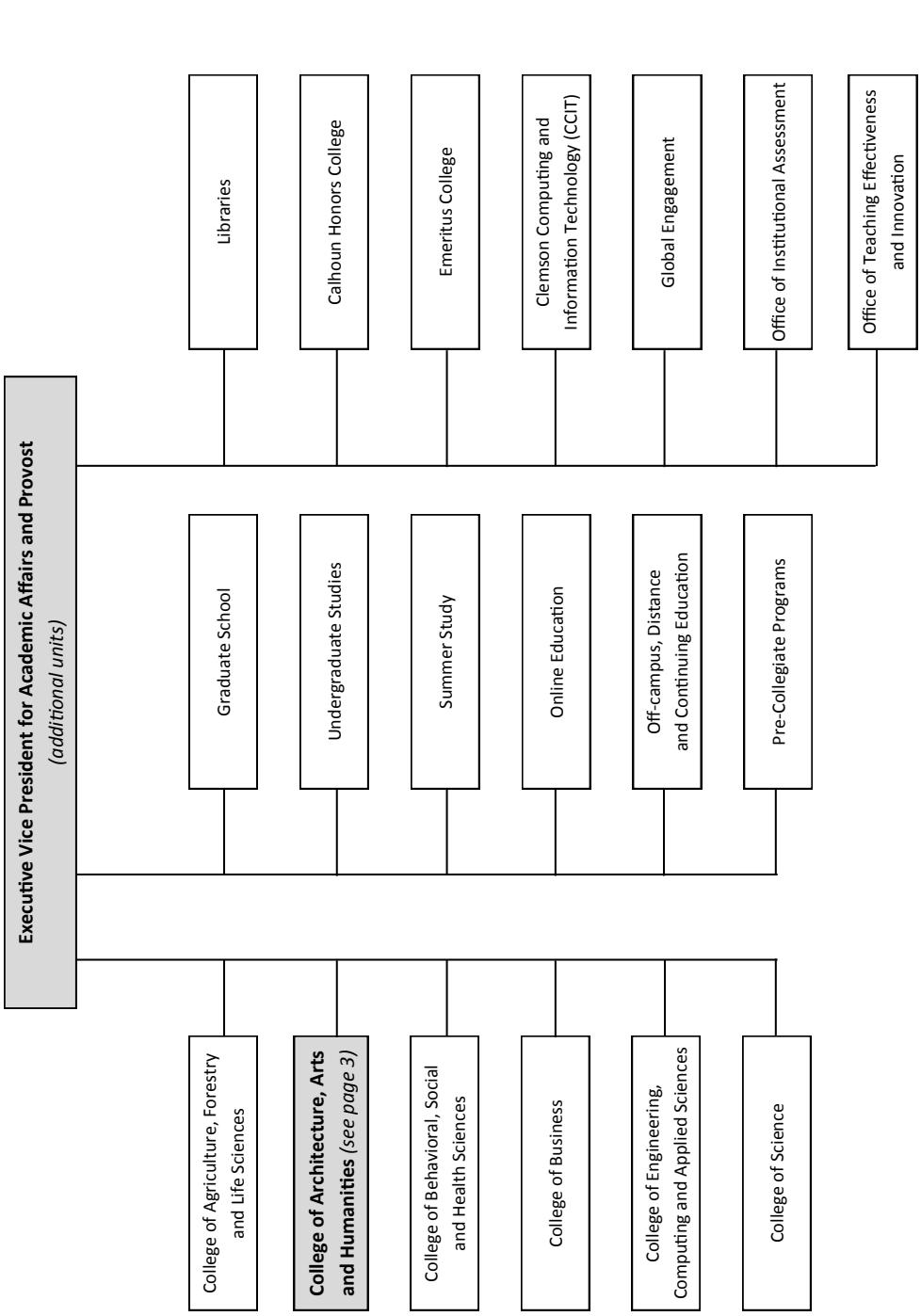
Organization Charts follow:

Note: The College of Architecture, Arts & Humanities is divided into three schools. These schools do not have any administration associated with them and do not affect the line of communication between the Dean and Department Chairs.

#1: University Level Organization

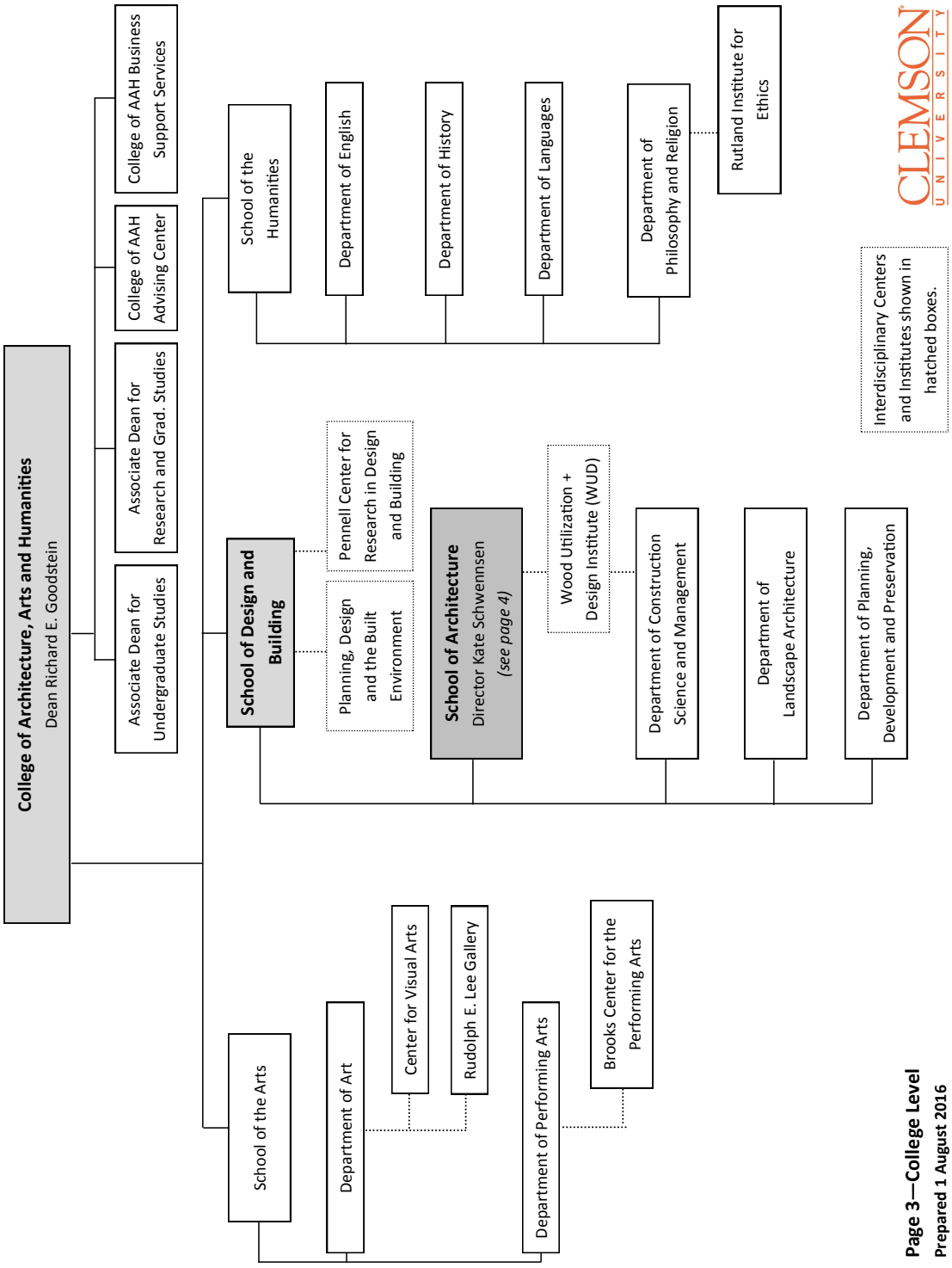


#2: Provost

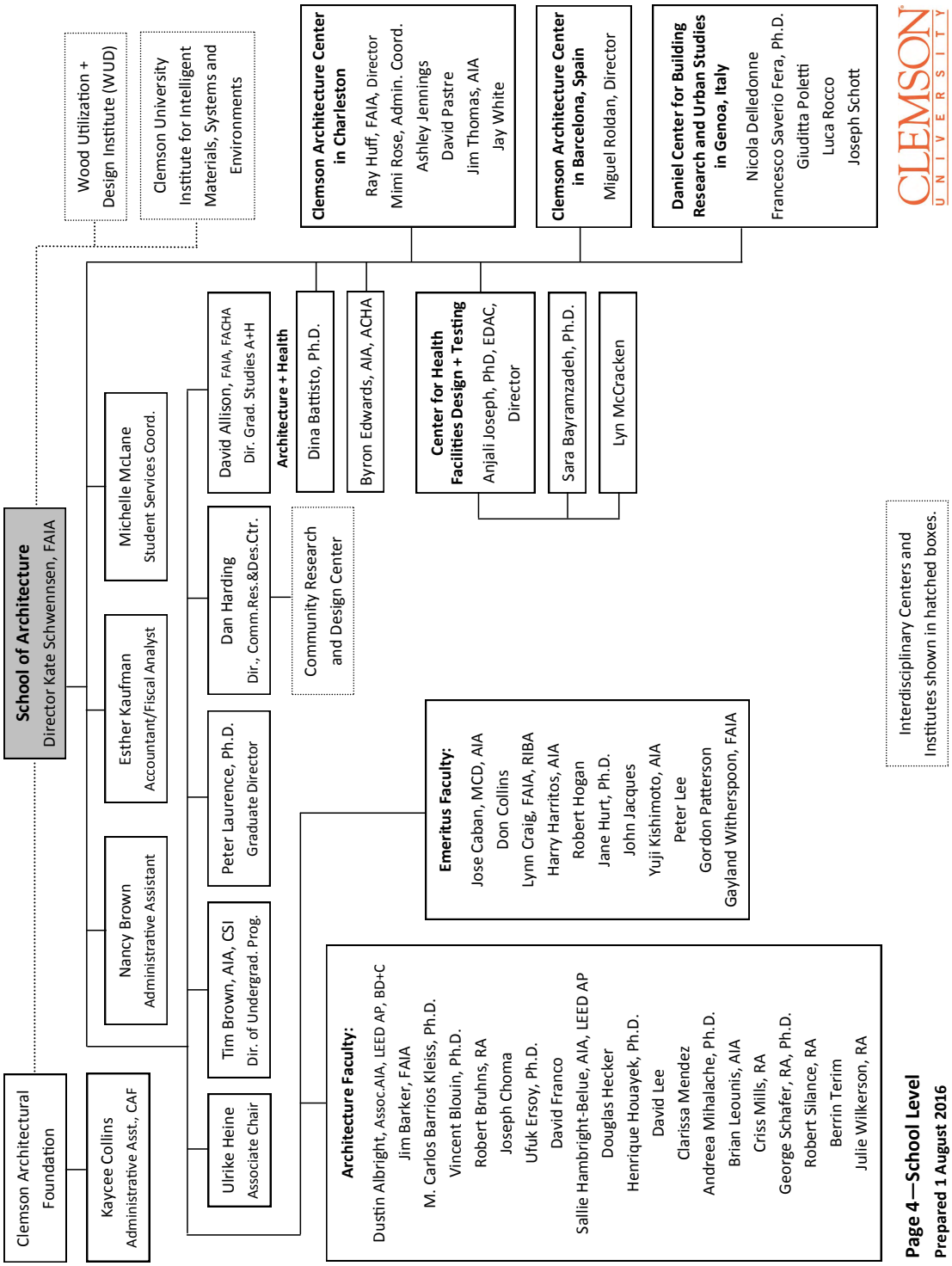


Page 2—University/College Level
Prepared 1 August 2016

#3: College of Architecture, Arts & Humanities



#4: School of Architecture



Governance:
The program demonstrates that all faculty, staff, and students have equitable opportunities to participate in program and institutional governance.

Faculty: At the School level, there may be management practices instituted by the Chair, but all policies are generated, discussed and approved by an appropriate body of elected committees or the faculty as a whole. Meetings of the faculty occur at least once a month. The School of Architecture Bylaws spell out aspects and structure of faculty governance, including the following standing committees:

- Faculty and Student Advisory Committee
- Teaching Streams
- Curriculum and Assessment Committee
- Honors and Awards Committee
- Faculty Search and Screening Committee
- Tenure, Promotion and Reappointment Committee
- Post Tenure Review Committee

The school has a number of other standing and ad hoc committees for both ongoing and short-term tasks, such as:

- Graduate Admissions Committee
- Sabbatical Committee
- Ad Hoc Assessment Committee
- Ad Hoc Lectures Committee
- Ad Hoc Directors Committee
- Career Fair Advisory Committee

A complete list of current school committees and their membership is included in Section 4.

At the College level, faculty meet once each semester where faculty have a voice in the generating, discussing and approving of matters pertaining to the College. The College of Architecture, Arts & Humanities' Bylaws spell out aspects and structure of faculty governance. Faculty are also represented on the College Faculty Advisory Council.
http://www.clemson.edu/caah/faculty-staff/deans-advisory-councils.html

At the University level, the faculty members of the University meet once each semester. However, the voice in terms of University governance comes through representation on the Faculty Senate. http://www.clemson.edu/faculty-staff/faculty-senate/

Staff: At the School level, staff members are included in the strategic planning process, and in faculty meetings as appropriate. They also meet with the Director of the School on a regular basis to discuss issues of concern. Staff members are also represented on the School of Architecture Faculty Search and Screening Committee.

At the College level, staff and faculty members meet regularly to learn about and discuss matters pertaining to the College. Staff members are also represented on the College Staff Advisory Council.
http://www.clemson.edu/caah/faculty-staff/deans-advisory-councils.html

At the University level, staff members are represented in the process of University governance through representation on the Staff Senate. http://www.clemson.edu/faculty-staff/staff-senate/

Students: At the School level, students are represented by a number of groups to participate in governance, in curricular discussions, and in general leadership for the school: The American Institute of Architecture Students, representing mostly the undergraduate students; the Graduate Architecture

Student Partnership representing the graduate students; the Women in Architecture Students; and the National Organization of Minority Architecture Students. Representatives from these groups are included in faculty meetings, and are the source for student participation on committees and activities.

At the College level, students from the School of Architecture serve as AAH Ambassadors, http://www.clemson.edu/caah/current-students/ambassador-applications.html

At the University level, undergraduate students have representation to Clemson's Undergraduate Student Government, https://www.clemson.edu/administration/student-affairs/student-handbook/studentgovernments/cusg/index.html

and the graduate students have representation to Clemson's Graduate Student Government, http://www.clemson.edu/students/cgsg/

II.1.1 Student Performance Criteria

Clemson's accredited degree programs assert that graduates possess the knowledge and skills defined by the criteria below as described below and in the Student Performance Criteria matrices.

A brief description of the methodology for assessing student work

As communicated to students in the M. Arch. program's Graduate Student Handbook, student work is assessed through the instructor's consideration of critical factors including Premise, Process, Precedent, Product, and Presentation, as follows. Premise: The work demonstrates understanding of the issues relevant to the design project or assignment, and has clear and intelligent ideas for a proposal, response, or solution. Precedent: The work was developed with an understanding and awareness of historical or contemporary architectural precedents, thereby recognizing disciplinary traditions and/or advancing them. Process: The work was pursued with a diligent exploration and refinement of design ideas, concepts, or written ideas throughout the time of development; responsiveness to criticism and suggestions from faculty and outside reviewers is also essential to progress and project development. Product: The work shows commitment, craftsmanship, and an appropriate level of skill. Presentation: The work was presented graphically and verbally with professionalism.

The above factors apply to studio and seminar work. For studio work, other factors are considered. In A-level or "high pass" studio work, innovation and imagination are demonstrated in the creation of the work and a significant depth of understanding is evident in the student's interpretation of the assignment's requirements. The full potential of the assignment is explored, developed, and communicated with great care and consideration. The student has no unexcused absences, has demonstrated an exemplary work ethic, and has been a good colleague and positive presence in the studio. The student has worked diligently throughout the entire semester, has consistently been prepared for studio with new work, and has completed all assignments throughout the semester with excellence and on time. All design work, whether two-dimensional or three-dimensional, shows excellent craftsmanship and abilities commensurate with the student's year level.

In contrast, "low pass" studio work has not met minimum requirements; is incomplete, undeveloped, unimaginative, uninspired, poorly crafted, or demonstrates little or no understanding; lacks depth, understanding, or imagination, and provokes few favorable comments, if any; care and craftsmanship of the work is inadequate and demonstrates a low level of skill and/or engagement; the student has unexcused absences and/or a lackluster work ethic, has not been prepared for studio with new work at many class meetings, and important assignments have not been completed or been poorly completed.

At Clemson University, all students receive whole letter final grades. Graduate students receive no credit for D or F grades, and students with a GPA of less than 3.0 B-average are automatically placed on academic probation and are subject to dismissal if their GPA does not rise to 3.0 or above in subsequent semesters.

Realm A: Critical Thinking and Representation.

Graduates from the Clemson M.Arch degree program(s) are 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 are able to use a diverse range of skills to think about and convey architectural ideas, including writing, investigating, speaking, drawing, and modeling. They are broadly educated, value lifelong inquisitiveness, can communicate graphically in a range of media, can assess evidence, are able to comprehend people, place and context, and recognize the disparate needs of client, community, and society.

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.

Basic communication skills and abilities are considered fundamental of all coursework, both studios and seminars. All students are expected to develop basic communication skills in their undergraduate degree program, and GPR scores and GRE verbal and analytical writing scores are evaluated in the application process to give some estimation of minimal verbal and writing abilities. Preparatory courses for Clemson architecture undergraduates are listed in the M.Arch II matrices. However, within the curriculum, architectural history and theory courses focus on analytical reading and writing, while speaking and listening skills are essential in design studios. Visual communication and representational media abilities are developed in visualization courses and all design studios. Pre-professional students are expected to have developed such skills to a fairly high level in the undergraduate architecture degree programs and their portfolios are evaluated for this at the time of admission. Non-pre-professional students have two required visualization courses. The first two design studios of the Three-Year sequence also emphasize these abilities. In the M.Arch+ Health degree programs, the required programming course also emphasizes these abilities.

Primary responsibility:
ARCH 6880 – Programming (Required in M.Arch + Health only)
ARCH 8100 – Visualization I
ARCH 8110 – Visualization II
ARCH 8600 – History/Theory I

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.

Design thinking skills and abilities are essential in all design studios and are evaluated in all studio reviews. This ability is evaluated in the review of portfolios of pre-professional applicants for the M. Arch. II. In the M.Arch I, this SPC is developed in the visualization courses, and the first design studio. In the M.Arch + Health degree programs the small projects studio and selected projects studio also have responsibility.

Primary responsibility:
ARCH 8100 – Visualization I
ARCH 8110 – Visualization II
ARCH 8410 – Architecture Studio I
ARCH 8950 – A+H Studio, Small Projects
ARCH 8960 – A+H Studio, Selected Projects

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.

As a fundamental research ability, investigative skills are developed in both seminars and studios. Pre-professional students are expected to have developed this ability as it relates to design projects, and this is evaluated in the review of their portfolios at the time of admission; it is evident in the intellectual challenges of more complex design projects developed in their final year of undergraduate architectural study. Within the M. Arch. I and II programs, this ability is developed in different ways in research papers, digital design fabrication projects, and analytical building technology studies. Within the M.Arch I programs the first 2 design studios and the first history course address this ability, and then in all programs the required research methods course brings great depth to the ability. The health internship adds to the ability in the M.Arch+Health programs.

Primary responsibility:
ARCH 8410 – Architecture Studio I
ARCH 8420 – Architecture Studio II
ARCH 8610 – History/Theory II
ARCH 8210 – Research Methods
HEALTH 6200 – Health Internship (M.Arch+ Health)

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.

Fundamental design abilities are necessarily developed in all design studios. Pre-professional students are expected to have developed this ability as it relates to design projects, and this is evaluated in the review of their portfolios at the time of admission. Development of this ability is thus of particular importance in the first three studios of the M.Arch I (and first studio of the M.Arch II), and two studios in the M.Arch+Health.

Primary responsibility:
ARCH 8410 – Architecture Studio I
ARCH 8420 – Architecture Studio II
ARCH 8510 – Design Studio II
ARCH 8950 – A+H Studio, Small Projects
ARCH 8960 – A+H Studio, Selected Projects

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.

Similar to and related to “A.6. Use of Precedents”, an understanding of ordering systems occurs in architectural history and theory courses through the study of exemplary architectural projects, structures courses, and in the design studio through the critique process. M.Arch II students are expected to have gained much of this foundational ability in their preprofessional degree programs, evidenced in portfolios.

Primary responsibility:
ARCH 8700 – Structures I
ARCH 8710 – Structures II
ARCH 8860 – Health Facilities Design and Planning (M.Arch + Health only)

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.

Typologically focused design projects begin with a focus on precedents, while design studio faculty habitually refer to applicable precedents in the course of their teaching, even when design proposals do not have a familiar typological precedent. Pre-professional students are expected to have developed this ability in their preprofessional education. Knowledge of precedents is also developed in architectural history and theory courses, and in the technical resolution course. In the M.Arch II program, the history/theory course offered in all 4 locations provides great opportunity for precedent study. In the M.Arch+Health programs, a unique history course and two design studios pay special attention to this ability.

Primary responsibility:
ARCH 8420 – Architecture Studio II
ARCH 8620 – History/Theory III, all locations
ARCH 6850 – History and Theory of Architecture + Health
ARCH 8960 – A+H Studio, Selected Projects
ARCH 8860 – Health Facilities Design & Planning (M.Arch + Health)

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.

The school's fluid campus, areas of specialization and international faculty bring great resources to the accomplishment of this understanding. Most of the school's history/theory faculty have been trained in the western canon and vernacular traditions, but they come from a range of nationalities and points of view. All of the required history/theory courses contribute to this understanding. Many of the design studios, particular those during "fluid" semesters, focus on providing students with a greater understanding of global culture.

Primary responsibility:
ARCH 8600 – History/Theory I
ARCH 8610 – History/Theory II
ARCH 8620 – History/Theory III, all locations
ARCH 8640 – History/Theory IV
ARCH 6850 – History and Theory of Architecture + Health

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.

The school's fluid campus, areas of specialization and diversity of faculty bring great resources to the accomplishment of this understanding. Numerous design studio courses and history/theory courses support the accomplishment of this understanding. The school's significant engagement in service-learning further supports an ethos, respect and understanding of equity, diversity and inclusion. All of the required history/theory classes and the required "fluid" studio support this understanding, as does the required health policy class in the M.Arch + Health programs, and the required community course in the A+CB certificate program.

Primary responsibility:
ARCH 8600 – History/Theory I
ARCH 8610 – History/Theory II
ARCH 8620 – History/Theory III, all locations
ARCH 8640 – History/Theory IV
ARCH 8570 – Design Studio V, all locations
ARCH 6850 – History and Theory of Architecture + Health
ARCH 8900 – Health Policy, Planning and Administration
(M.Arch + Health only, Now ARCH 8650)
ARCH 8320 – Community 1:1 (A+CB Certificate only)

Realm B: Building Practices, Technical Skills, and Knowledge. Graduates from the Clemson M.Arch degree program(s) are able to comprehend the technical aspects of design, systems, and materials and are able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment is well considered. Graduates are able to create building designs with well-integrated systems; comprehend constructability; integrate the principles of environmental stewardship; and convey technical information accurately.

Clemson's M.Arch curricula includes two structures courses in the first year of the M.Arch I, two building technologies courses in the Second Year, and a course focusing on technical resolution in the Third Year, along with a culminating comprehensive studio. In design studios, accessibility, constructability, life safety, and sustainable design principles are considered from early on in the studio sequence.

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.

Pre-Design abilities are developed throughout the curricula, but particularly in the design studios of the 2nd and 3rd years of the M.Arch programs. In the M.Arch+Health programs, the ability is further strengthened with the required programming and health facilities design and planning courses.

Primary responsibility:
ARCH 8510 – Design Studio III
ARCH 8520 – Design Studio IV (all locations)
ARCH 8570 – Design Studio V (all locations)
ARCH 6880 – Architectural Programming (M.Arch + Health)
ARCH 8970 – A+H Studio: Hospitals (M.Arch + Health)
ARCH 8860 – Health Facilities Design and Planning (M.Arch + Health)
ARCH 8920 – Comprehensive Studio (M.Arch + Health)

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.

Site design abilities begin to be developed in the first studio, although a particular focus occurs in the "fluid" semester, semesters 4 and 5 of the M.Arch I, when students are often off-campus, and often in vertical and multi-disciplinary studio with Landscape Architecture students. In the M.Arch+Health programs, the focus is in semester 3 or 5 as ARCH 8970 is offered in odd number years only.

Primary responsibility:
ARCH 8520 – Design Studio IV (all locations)
ARCH 8570 – Design Studio V (all locations)
ARCH 8970 – A+H Studio – Hospitals (M.Arch + Health)

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.

Life safety and accessibility concerns are so fundamental that related design abilities begin to be developed starting in the first studio. By the time of the comprehensive design studios of the Third Year students are expected to consider multiple points of egress and maximum travel distance as appropriate to the building occupancy. The second professional practice course is integrated with the comprehensive studio to support this ability. In the M.Arch+Health programs, the hospital design studio takes responsibility, but students are held accountable throughout the studio sequence.

Primary responsibility:
ARCH 8820 – Professional Practice II
ARCH 8920 – Comprehensive Studio
ARCH 8970 – A+H Studio: Hospitals (M.Arch + Health)

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.

Students abilities in technical documentation is developed through the integration of technical courses with design studios in semesters III and VI of the M.Arch I. The content is delivered in the technical courses, and expected to be applied in the design studios.

Primary responsibility:
ARCH 8720 – Productions & Assemblies
ARCH 8740 – Building Processes: Technical Resolution

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.

Structural systems are the focus of two courses in the first year of the M.Arch I. Pre-professional students are expected to have taken two equivalent courses in the undergraduate programs. If they have not taken a second course, they must take the second course in Clemson. In semester III, students are expected to illustrate their level of ability in the productions and assemblies course and accompanying studio. The final comprehensive studio also requires students to prove this ability.

Primary responsibility: ARCH 8700 – Structures I
ARCH 8710 – Structures II

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.

Environmental systems are the focus of semester V in the M.Arch I. A course by this name provides content, some of which is expected to be applied in the parallel design studio. The comprehensive studio – ARCH 8920 - expects students to demonstrate this ability.

Primary responsibility: ARCH 8520 - Studio V, (all locations)
ARCH 8730 - Environmental Systems

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.

The study of building envelope systems and assemblies is part of the environmental systems and technical resolution courses. The comprehensive studio – ARCH 8920 - expects students to demonstrate this understanding.

Primary responsibility: ARCH 8730 – Environmental Systems
ARCH 8740 – Technical Resolution

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.

The study of building materials and assemblies is the focus of a technical course in semester III that is integrated with design studio, and the second structures course. Evidence of understanding is expected in the comprehensive studio.

Primary responsibility: ARCH 8710 – Structures II
ARCH 8720 – Productions and Assemblies

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.

This content is included in the technical resolution course, and expected to be evidenced in the comprehensive studio project, both in semester VI.

Primary responsibility: ARCH 8740 – Technical Resolution

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.

Financial considerations are taken up in the second of the two professional practice courses.

Primary responsibility: ARCH 8820 – Professional Practice II

Realm C: Integrated Architectural Solutions. Graduates from the Clemson M.Arch degree programs are able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution, including: 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.

A brief description of the pedagogy and methodology used to address Realm C:

Students are exposed to the complexity of architectural design solutions from the very start of their studies at Clemson. The Graduate Program/Student Handbook, which students are encouraged to read during the summer before starting their studies, and the syllabi for ARCH 8410 Design Studio I and ARCH 8420 Design Studio II discuss design problems as "wicked problems" (Rittel and Webber, 1973)— problems with multiple variables and often competing considerations. Students in the First Year of studies are similarly encouraged to think of design problems and challenges as "critical thinking" exercises judged in part by analysis of existing conditions, parameters, and premises and the *reasoned* selection of the best among multiple possible solutions. Finally, already at the start of their studies (as discussed in the Program Handbook and in the First Year studios), students are encouraged to think of their education experience as an opportunity to create a "meta-project"—that is, to not passively receive each studio project, but to take independent control of each studio, and all of the four or six studios in their degree tracks, by defining their own educational agendas and development of their unique interests and expertise.

The Architecture + Health program emphasizes the complex integration of the issues and multiple dimensions of healthcare architecture through numerous course offerings and the seamless sequencing and alignment of multiple courses including ARCH 8900 [now ARCH 8650], HLTH 6200, ARCH 6880, ARCH 8860 and all of it's studios including ARCH 8950, ARCH 8960 and ARCH 8970 leading up to the Comprehensive Studio ARCH 8920 or Thesis Studio ARCH 8910. Entire semesters or academic years are often aligned topically with research, precedent analysis, programming, site/context analysis and technical content and methods introduced in seminars examined in studios in the same or subsequent semester. An example of this is evident in the recent NCARB award year focused on the design of Ambulatory Care Facilities.

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

Applied research methods are used throughout the curricula, but are specifically taught in a research methods course, and also developed in the final history/theory course. Scholarly and other modes of applied research are primary to the thesis option offered within the Architecture + Health concentration.

Primary responsibility: ARCH 8210 – Research Methods
ARCH 8640 – History/Theory IV
HEALTH 6200 – Health Internship (M.Arch + Health)

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.

Semesters III and VI of the M.Arch are highly integrated semesters, with technology courses "built" around the design studio. Integrated evaluations and decision-making in the design process are the expectations of both of these design studios. Additionally, the research methods course provides students with tools for predicting effectiveness.

Primary responsibility:
ARCH 8210 – Research Methods
ARCH 8740 – Technical Resolution
ARCH 8570 – Design Studio V, (all locations)
ARCH 8860 Seminar + ARCH 8970 A+H Studio [M.Arch+Health]
ARCH 8920 – Comprehensive Studio

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.

Semesters III and VI of the M.Arch are highly integrated semesters, with technology courses "built" around the design studio. Integrated evaluations and decision-making in the design process are the expectations of both of these design studios. A complex and fully integrated comprehensive design project is considered the culmination of the M.Arch.

Primary responsibility:
ARCH 8510 – Design Studio III
ARCH 8920 – Comprehensive Studio
or
ARCH 8910 – Thesis Studio [M.ARCH+ Health only]

Realm D: Professional Practice. Graduates from Clemson's M.Arch degree programs 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. They comprehend the business of architecture and construction; are able to discern the valuable roles and key players in related disciplines; and understand a professional code of ethics, as well as legal and professional responsibilities. In conjunction with courses focusing on professional practice, various opportunities for community service, leadership opportunities, ethics and leadership programs, a long-standing lecture series, and a robust professional alumni network, the school develops graduates who are professionally and ethically minded.

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.

Study of the stakeholder roles in architecture is part of the first of two professional practice courses, and is also inherent to the many studios that engage community members. It is also central to the Architecture + Health concentration, as seen in three required courses:

Primary responsibility:
ARCH 8810 – Professional Practice I
ARCH 6880 – Architectural Programming
ARCH 8900 - Health Policy Planning & Admin. [M.ARCH+Health]
HEALTH 6200 – Health Internship [M.Arch+Health]

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.

An understanding of project management is a goal of the first professional practice course.

Primary responsibility: ARCH 8810 – Professional Practice I

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.

An understanding of legal responsibilities is a goal of the second professional practice course, and is also content in the first professional practice course.

Primary responsibility: ARCH 8820 – Professional Practice II

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.

An understanding of professional conduct is a goal of the first professional practice course.

Primary responsibility: ARCH 8810 – Professional Practice I

SPC Matrices: Follow
https://www.dropbox.com/s/5uri56xcpfi6voo/Final%20SPC%20Matrices.pdf?dl=0

M.Arch I (90 Credits)

Sem	Number	Name	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	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decision-Making Process	Integrative Design	Stakeholder Roles in Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct	
Courses			**A.1**	**A.2**	**A.3**	**A.4**	**A.5**	**A.6**	**A.7**	**A.8**	**B.1**	**B.2**	**B.3**	**B.4**	**B.5**	**B.6**	**B.7**	**B.8**	**B.9**	**B.10**	**C.1**	**C.2**	**C.3**	**D.1**	**D.2**	**D.3**	**D.4**	**D.5**	
			Realm A: Critical Thinking and Representation								*Realm B: Building Practices, Technical Skills and Knowledge*										*Realm C: Integrated*			*Realm D: Professional Practice*					
SPC met in NAAB-accredited degree: Required courses only																													
I	**Arch 8100**	Visualization I	●	●																									2
	Arch 8410	Architecture Studio I		●	●	●																							3
	Arch 8600	History and Theory I	●						●	●																			3
	Arch 8700	Structures I					●								●														2
II	**Arch 8110**	Visualization II	●	●																									2
	Arch 8420	Architecture Studio II			●	●		●																					3
	Arch 8610	History-Theory II			●				●	●																			3
	Arch 8710	Structures II					●								●			●											3
III	**Arch 8210**	Research Methods			●																●	●							3
	Arch 8510	Design Studio III				●					●												●						3
	Arch 8720	Production & Assemblies												●	●			●											3
	Arch 8810	Professional Practice I																						●	●	●		●	4
IV	**Arch 8520**	Design Studio IV, All locations									●	●				●													3
	Arch 8620	History/Theory III, All locations						●	●	●																			3
	Arch 8730	Environmental Systems														●	●												2
V	**Arch 8570**	Design Studio V, All locations								●	●	●										●							4
VI	**Arch 8640**	History-Theory IV							●	●											●								3
	Arch 8740	Technical Resolution												●			●		●			●							4
	Arch 8820	Professional Practice II											●							●							●		3
	Arch 8920	Comprehensive Studio (Studio VI)											●									●	●						3
			3	3	4	3	2	2	4	5	3	2	2	2	3	2	2	2	1	1	2	4	2	1	1	1	1	1	

M.Arch II (60 Credits)

		Courses	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	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decision-Making Process	Integrative Design	Stakeholder Roles in Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct	
			A.1	**A.2**	**A.3**	**A.4**	**A.5**	**A.6**	**A.7**	**A.8**	**B.1**	**B.2**	**B.3**	**B.4**	**B.5**	**B.6**	**B.7**	**B.8**	**B.9**	**B.10**	**C.1**	**C.2**	**C.3**	**D.1**	**D.2**	**D.3**	**D.4**	**D.5**	
Number	Name		*Realm A: Critical Thinking and Representation*								*Realm B: Building Practices, Technical Skills and Knowledge*										*Realm C: Integrated*			*Realm D: Professional Practice*					
SPC expected to have been met in preparatory or pre-professional education, if applicable																													
1st	AAH 1010	Survey of Art & Arch History I							●	●																			
	AAH 1020	Survey of Art & Arch History II							●	●																			
	Arch 1510	Architecture Communication	●	●																									
2nd	Arch 2700	Structures I					●								●														
	Arch 2040	History & Theory of Arch II							●	●																			
	Arch 2510	Architecture Foundations I		●			●	●																					
	Arch 2520	Architecture Foundations II	●	●																									
3rd	Arch 3500	Studio Fall			●	●																							
	Arch 3510	Studio Spring, All locations				●																							
3/4	Varies	HT Options, All locations							●	●																			
	Arch 2710	Structures II					●								●			●											
	Arch 4010	Portfolio	●																										
4th	Arch 3510	Studio Fall, All locations								●																			
	Arch 4520	Synthesis Studio			●	●																							
SPC met in NAAB-accredited degree: Required Courses Only																													
III	**Arch 8210**	Research Methods			●																●	●							3
	Arch 8510	Design Studio III				●					●												●						3
	Arch 8720	Production & Assemblies												●	●			●											3
	Arch 8810	Professional Practice I																						●	●	●		●	4
IV	**Arch 8520**	Design Studio IV, All locations									●	●				●													3
	Arch 8620	History/Theory III, All locations						●	●	●																			3
	Arch 8730	Environmental Systems														●	●												2
V	**Arch 8570**	Design Studio V, All locations								●	●	●										●							4
VI	**Arch 8640**	History-Theory IV							●	●											●								3
	Arch 8740	Technical Resolution												●			●		●			●							4
	Arch 8820	Professional Practice II											●							●							●		3
	Arch 8920	Comprehensive Studio (Studio VI)											●									●	●						3

M.Arch + Health I (91 Credits)

		Courses	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	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decision-Making Process	Integrative Design	Stakeholder Roles in Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct	
			A.1	**A.2**	**A.3**	**A.4**	**A.5**	**A.6**	**A.7**	**A.8**	**B.1**	**B.2**	**B.3**	**B.4**	**B.5**	**B.6**	**B.7**	**B.8**	**B.9**	**B.10**	**C.1**	**C.2**	**C.3**	**D.1**	**D.2**	**D.3**	**D.4**	**D.5**	
	Number	Name	*Realm A: Critical Thinking and Representation*								*Realm B: Building Practices, Technical Skills and Knowledge*										*Realm C: Integrated*			*Realm D: Professional Practice*					
SPC met in NAAB-accredited degree: Non-Thesis, Required courses only																													
I	**Arch 8100**	Visualization I	●	●																									2
	Arch 8410	Architecture Studio I		●	●	●																							3
	Arch 8600	History and Theory I	●						●	●																			3
	Arch 8700	Structures I					●								●														2
II	**Arch 8110**	Visualization II	●	●																									2
	Arch 8420	Architecture Studio II			●	●		●																					3
	Arch 8610	History-Theory II			●				●	●																			3
	Arch 8710	Structures II					●								●			●											3
III	**Arch 6850**	History and Theory of A+H						●	●	●																			3
	Arch 8950	A+H Studio: Small Projects		●		●																							2
	Arch 8210	Research Methods			●																●	●							3
	Arch 8720	Production & Assemblies												●	●			●											3
IV	**Arch 6880**	Architectural Programming	●								●													●					3
	Arch 8730	Environmental Systems														●	●												2
	Arch 8900	Health Policy Planning & Admin.								●														●		●			3
	Arch 8960	A+H Studio: Selected Projects		●		●		●																					3
S	**Health 6200**	Health Internship			●																●			●					3
V	**Arch 8970**	A+H Studio: Hospitals									●	●	●																3
	Arch 8860	Health Facilities Design and Planning					●	●			●																		3
	Arch 8810	Professional Practice I																						●	●	●		●	4
VI	**Arch 8740**	Technical Resolution												●			●		●			●							4
	Arch 8820	Professional Practice II											●							●							●		3
	Arch 8920	A+H Comprehensive Studio									●											●	●						3
			4	5	5	4	3	4	3	4	4	1	2	2	3	1	2	2	1	1	2	3	1	4	1	2	1	1	

M.Arch + Health II (61 credits)

	Courses		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	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decision-Making Process	Integrative Design	Stakeholder Roles in Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct	
	Number	Name	A.1	A.2	A.3	A.4	A.5	A.6	A.7	A.8	B.1	B.2	B.3	B.4	B.5	B.6	B.7	B.8	B.9	B.10	C.1	C.2	C.3	D.1	D.2	D.3	D.4	D.5	
			Realm A: Critical Thinking and Representation								*Realm B: Building Practices, Technical Skills and Knowledge*										*Realm C: Integrated*			*Realm D: Professional Practice*					
SPC expected to have been met in preparatory or pre-professional education, if applicable																													
1st	AAH 1010	Survey of Art & Arch History I							●	●																			
1st	AAH 1020	Survey of Art & Arch History II							●	●																			
1st	Arch 1510	Architecture Communication	●	●																									
2nd	Arch 2700	Structures I					●								●														
2nd	Arch 2040	History & Theory of Arch II							●	●																			
2nd	Arch 2510	Architecture Foundations I		●			●	●																					
2nd	Arch 2520	Architecture Foundations II	●	●																									
3rd	Arch 3500	Studio Fall			●	●																							
3rd	Arch 3510	Studio Spring, All locations				●																							
3/4	Varies	HT Options, All locations							●	●																			
3/4	Arch 2710	Structures II					●								●			●											
3/4	Arch 4010	Portfolio	●																										
4th	Arch 3510	Studio Fall, All locations								●																			
4th	Arch 4520	Synthesis Studio			●	●																							
SPC met in NAAB-accredited degree: Non-Thesis, Required courses only																													
III	**Arch 6850**	History and Theory of A+H						●	●	●																			3
III	**Arch 8950**	A+H Studio: Small Projects		●		●																							2
III	**Arch 8210**	Research Methods			●																●	●							3
III	**Arch 8720**	Production & Assemblies												●	●			●											3
IV	**Arch 6880**	Architectural Programming	●								●													●					3
IV	**Arch 8730**	Environmental Systems														●	●												2
IV	**Arch 8900**	Health Policy Planning & Admin.								●														●		●			3
IV	**Arch 8960**	A+H Studio: Selected Projects		●		●		●																					3
S	**Health 6200**	Health Internship			●																●			●					3
V	**Arch 8970**	A+H Studio: Hospitals									●	●	●																3
V	**Arch 8860**	Health Facilities Design and Planning					●	●			●																		3
V	**Arch 8810**	Professional Practice I																						●	●	●		●	4
VI	**Arch 8740**	Technical Resolution												●			●		●			●							4
VI	**Arch 8820**	Professional Practice II											●							●							●		3
VI	**Arch 8920**	A+H Comprehensive Studio									●											●	●						3

Master SPC Matrix

(All courses listed in ascending order)

		Courses	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	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decision-Making Process	Integrative Design	Stakeholder Roles in Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct	
			A.1	**A.2**	**A.3**	**A.4**	**A.5**	**A.6**	**A.7**	**A.8**	**B.1**	**B.2**	**B.3**	**B.4**	**B.5**	**B.6**	**B.7**	**B.8**	**B.9**	**B.10**	**C.1**	**C.2**	**C.3**	**D.1**	**D.2**	**D.3**	**D.4**	**D.5**	
			Realm A:								*Realm B:*										*Realm C:*			*Realm D:*					
	Number	Name	*Critical Thinking and Representation*								*Building Practices, Technical Skills and Knowledge*										*Integrated*			*Professional Practice*					
SPC expected to have been met in preparatory or pre-professional education, if applicable																													
1st	AAH 1010	Survey of Art & Arch History I							●	●																			2
	AAH 1020	Survey of Art & Arch History II							●	●																			2
	Arch 1510	Architecture Communication	●	●																									2
2nd	Arch 2700	Structures I					●								●														2
	Arch 2040	History & Theory of Arch II							●	●																			2
	Arch 2510	Architecture Foundations I		●			●	●																					3
	Arch 2520	Architecture Foundations II	●	●																									2
3rd	Arch 3500	Studio Fall			●	●																							2
	Arch 3510	Studio Spring, All locations				●																							1
3/4	Varies	HT Options, All locations							●	●																			2
	Arch 2710	Structures II					●								●			●											3
	Arch 4010	Portfolio	●																										1
4th	Arch 3510	Studio Fall, All locations								●																			1
	Arch 4520	Synthesis Studio			●	●																							2
SPC met in NAAB-accredited degree																													
	Arch 6850	History and Theory of A+H						●	●	●																			3
	Arch 6880	Architectural Programming	●								●													●					3
	Arch 8100	Visualization I	●	●																									2
	Arch 8110	Visualization II	●	●																									2
	Arch 8210	Research Methods			●																●	●							3
	Arch 8410	Architecture Studio I		●	●	●																							3
	Arch 8420	Architecture Studio II			●	●		●																					3
	Arch 8510	Design Studio III				●					●												●						3
	Arch 8520	Design Studio IV, All locations									●	●				●													3
	Arch 8570	Design Studio V, All locations								●	●	●										●							4
	Arch 8580	Thesis Research			●			●													●								3
	Arch 8590	Thesis Manuscript	●		●																●								3
	Arch 8600	History and Theory I	●						●	●																			3
	Arch 8610	History-Theory II			●				●	●																			3
	Arch 8620	History/Theory III, All locations						●	●	●																			3
	Arch 8640	History-Theory IV							●	●											●								3
	Arch 8700	Structures I					●								●														2
	Arch 8710	Structures II					●								●			●											3
	Arch 8720	Production & Assemblies												●	●			●											3
	Arch 8730	Environmental Systems														●	●												2
	Arch 8740	Technical Resolution												●			●		●			●							4
	Arch 8810	Professional Practice I																						●	●	●		●	4
	Arch 8820	Professional Practice II											●							●							●		3
	Arch 8860	Health Facilities Design and Planning					●	●			●																		3
	Arch 8900	Health Policy Planning & Admin.								●														●		●			3
	Arch 8910	Thesis Project																			●	●	●						3
	Arch 8920	A+H Comprehensive Studio									●											●	●						3
	Arch 8920	Comprehensive Studio (Studio VI)											●									●	●						3
	Arch 8950	A+H Studio: Small Projects		●		●																							2
	Arch 8960	A+H Studio: Selected Projects		●		●		●																					3
	Arch 8970	A+H Studio: Hospitals									●	●	●																3
	Health 6200	Health Internship			●																●			●					3

II.2.1 Institutional Accreditation

SACS COC
SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS
COMMISSION ON COLLEGES

January 13, 2014

Mr. James F. Barker, FAIA
President
Clemson University
201 Sikes Hall
Clemson, SC 29634

Dear Mr. Barker:

The following action regarding your institution was taken by the Board of Trustees of the Southern Association of Colleges and Schools Commission on Colleges during its meeting held on December 9, 2013:

> The SACSCOC Board of Trustees reaffirmed accreditation. No additional report was requested. Your institution's next reaffirmation will take place in 2023 unless otherwise notified.

Please submit to your Commission staff member, preferably by email, a **one-page** executive summary of your institution's Quality Enhancement Plan. The summary is due **February 14, 2014**, and should include on the same page the following information: (1) the title of your Quality Enhancement Plan, (2) your institution's name, and (3) the name, title, and email address of an individual who can be contacted regarding its development or implementation. This summary will be posted to the Commission's Web site as a resource for other institutions undergoing the reaffirmation process.

All institutions are requested to submit an "Impact Report of the Quality Enhancement Plan on Student Learning" as part of their "Fifth-Year Interim Report" due five years before their next reaffirmation review. Institutions will be notified 11 months in advance by the President of the Commission regarding its specific due date.

We appreciate your continued support of the activities of SACS Commission on Colleges. If you have questions, please contact the staff member assigned to your institution.

Sincerely,

Belle S. Wheelan

Belle S. Wheelan, Ph.D.
President

BSW:cp

cc: Dr. Barry D. Goldstein

1866 Southern Lane • Decatur, Georgia 30033-4097 • Telephone 404/679-4501 • Fax 404/679-4558
www.sacscoc.org

II.2.2 Professional Degrees and Curriculum

Clemson's School of Architecture offers the following Master of Architecture programs of study:

Master of Architecture
M. Arch. I, Non-Pre-Professional + 90 Graduate Credits (Three Year track)
M. Arch. II, Pre-Professional + 60 Graduate Credits (Two Year track)

Master of Architecture with Architecture + Health (A+H) Concentration:
M. Arch. I, Non-Pre-Professional + 91 Graduate Credits (Three Year track)
M. Arch. II, Pre-Professional + 61 Graduate Credits (Two Year track)

Overarching University/Program Curricular Framework: Credits Per Semester = 15

Clemson University has a semester system, and it is the policy of the university's Graduate School, which oversees all graduate programs, that the maximum number of credit hours per semester for graduate students is 15. The minimum credit hours for full-time graduate students is 9 credit hours per semester. However, the general structure of our graduate programs is no more or less than 15 credit hours per semester, which translates into one 6-credit design studio and three 3-credit required and elective courses per semester.

Overarching Framework of Degree Tracks and Relationship of Two- and Three-Year Tracks

The M. Arch. I is a three-year, 90-credit hour degree track for students without a portfolio of 6-8 semesters of strong architecture studio work. Students in the M. Arch. I track have diversity of undergraduate majors, including architecture and architectural studies, and various design (art, city planning, urban design, landscape architecture, industrial design, and others) and non-design backgrounds (business, economics, engineering, literature, psychology, and other fields).

The **M. Arch. II is a two-year, 60-credit hour degree track** for students with a pre-professional Bachelor's degree (BA or BS) in Architecture and strong portfolios documenting 6 to 8 semesters of design studio work. The M. Arch. II track is an advanced placement track and a BA or BS in a pre-professional architecture program is a minimum requirement. A competitive portfolio is also required. In the context of applicant pool, advanced placement is determined by the Admissions Committee during the application and portfolio review process.

The Master of Architecture degree programs are considered three-year programs in which students with pre-professional preparation are eligible to receive advanced placement and begin the program in the Second Year. Therefore, Three-Year students join the class of Two-Year students after completing a year of coursework, at which time Two-Year and Three-Year students' curriculum is generally the same.

Relationship of General and Specialized Degree Tracks: M. Arch.

Clemson strives to offer students as many opportunities as possible within the structures and requirements of the M.Arch. degree., and offers a general M. Arch. program in which students may determine an individual area of concentration and may spend up to two semesters in an off-campus study center. Certificate programs offer M.Arch. students the opportunity to focus their elective coursework and begin to develop a specialization in a subject area. The successful completion of a certificate program is noted on the graduate's transcript. Certificate programs are electives and take place in the same semesters as off-campus study.

1. Architecture + Community Build is an application-based, 18-credit hour certificate program focused on community engagement and a holistic approach to design-build. Through community engagement and appropriate design solutions, Architecture + CommunityBUILD (A+CB) students learn

how architecture can be a catalyst for positive change. This program is designed for M.Arch. and M.S. Arch. students who wish to further their understanding and application of a community centric architecture + process, design + building at full scale, sustainable programming + entrepreneurship, and post project documentation + sustained community impact. True to the University's mission, the program embodies the spirit of service-learning and student engagement while celebrating family and community living, sustainable environments, leadership and entrepreneurism, and general education.

The A+CB program involves required architectural design studios and required courses that address specific projects and research questions associated with community design, sustainable practices, and full-scale design and building. The certificate requires 18 credit hours of design studios and courses in Clemson and at the Clemson Architecture Center in Charleston (CACC) that can be used to partially fulfill the requirements for the M.Arch. and M.S. Arch. The earned certificate will be acknowledged on the recipient's academic transcript.

Admission to the Architecture + CommunityBUILD certificate program will be granted through a competitive application process based on portfolio, GPA, and personal interview. Admission will also require application to and acceptance of placement for off-campus study in Charleston in Semester 5 (Fall).

2. Digital Ecologies is an elective course focused, 9-credit hour certificate program focused on architectural technologies, cultivating design research and design practices that are responsive to and augment an increasingly digital society. More specifically, the program aims to cultivate the theory, application and innovation of the following sub-areas:

- Computational Design and Morphology
- Parametric Design and Shape Grammars
- Digital Fabrication
- Smart Materials and Smart Structures
- Interaction design at the scale of the built environment
- History and theory of digital tools, methods and environmental artifacts

The Digital Ecologies certificate program includes a range of courses that may be chosen to address specific research questions and interests. A minimum of 9 credit hours are required to earn the certificate; these credits can be used to partially fulfill the requirements of the M.Arch., M.S. Arch., and PhD PDBE degrees. There is no procedure or criteria for the selection of students into the certificate program. Interested students need only: complete the minimum credit hours prior to graduation; submit a completed Graduate Certificate Curriculum Form to the School office for signatures; and submit this signed form with the required form for requesting graduation. The earned certificate will be acknowledged on the recipient's academic transcript.

Relationship of General and Specialized Degree Tracks: M.Arch + Health

There are parallel degree tracks with a concentration in Architecture + Health.

The **M. Arch. I in A+H is a three-year, 91-credit hour degree track** for students without a portfolio of 6-8 semesters of strong architecture studio work, as noted above, who wish to focus their studies—in studios and elective courses—in Architecture + Health. The A+H program also requires a summer internship, adding a minimum of one credit to the core program.

The **M. Arch. II in A+H is a two-year, 61-credit hour degree track** for students with a pre-professional Bachelor's degree in Architecture as noted above, who wish to pursue a concentration in Architecture + Health. The A+H program requires a summer internship, adding a minimum of one credit to the core program.

The M. Arch. with a concentration in Architecture + Health is related in structure and credit hours to the general M. Arch. curriculum. In the A+H program, however, students elect to focus on architecture and health studies instead of other areas of concentration or elective study. Students make this choice at the time of application to the program, or, more rarely, seek acceptance into the A+H program (which is limited in the number of students that it can serve) after admission to the general program. Off campus study in Architecture + Health is currently not offered within the two or three year tracks. Students with a pre-professional undergraduate degree may elect to defer enrollment until the spring and take an additional semester of study abroad prior to entering the final two years of study in the concentration. The M. Arch. with a concentration in Architecture + Health is recognized as a unique course of study by Clemson University and it is recognized nationally as the most comprehensive program of it's kind in this area of study.

Outline of Degree Tracks and Curriculum Options:

M. ARCH. I (NON-PRE-PROFESSIONAL + 90 GRADUATE CREDITS)

Prerequisites: Bachelor's degree in any major (including architecture), with at least 45 credits of NON-architectural coursework.

FIRST YEAR	FALL: Semester I		SPRING: Semester 2
6	ARCH 8410 Design Studio I	6	ARCH 8420 Design Studio II
3	ARCH 8100 Visualization I	3	ARCH 8110 Visualization II
3	ARCH 8600 Architectural History/Theory I	3	ARCH 8610 Architectural History/Theory II
3	ARCH 8700 Structures I	3	ARCH 8710 Structures II
15 credits		15 credits	
SECOND YEAR	**FALL: Semester 3**		**SPRING: Semester 4**
6	ARCH 8510 Design Studio III	6	ARCH 8520 Design Studio IV (Clemson, Charleston, Barcelona, or Genoa)
3	ARCH 8210 Research Methods	3	ARCH 8730 Environmental Systems
3	ARCH 8720 Production & Assemblies + 8721 Lab	3	ARCH 8620 Architectural History and Theory III
3	ARCH 8810 Professional Practice I	3	Elective (or Structures II: See notes)
15 credits		15 credits	
THIRD YEAR	**FALL: Semester 5**		**SPRING: Semester 6**
6	ARCH 8570 Design Studio V (Clemson, Charleston, Barcelona, or Genoa)	6	ARCH 8920 Design Studio VI (Comprehensive Studio)
3	Elective	3	ARCH 8640 Architectural History and Theory IV
3	Elective	3	ARCH 8740 Building Processes: Technical Resolution + 8741 Lab
3	Elective	3	ARCH 8820 Professional Practice II
15 credits		15 credits	

90 GRADUATE CREDIT HOURS (+ Bachelor's degree with 45 min. NON-ARCHITECTURAL credits) for M. ARCH. I, Non-Pre-Professional

Notes:

Structures II: All students must have taken the equivalent of ARCH 8710 Structures II as undergraduates or must take this course, even if this requires staying on-campus for Semester 4 and excludes other electives.

Electives: Any Clemson University graduate level course numbered 6000 and above.

Fluid Campus Course Options: Off-campus study is an elective. Off-campus centers have limited second-tier elective options.

M. ARCH. II (PRE-PROFESSIONAL + 60 GRADUATE CREDITS)

Prerequisites: Bachelor's degree in architecture, with at least 45 credits of NON-architectural coursework.

Advanced Placement: Qualified Pre-Professional students receive advanced placement and waive the first two semesters.

FIRST YEAR	FALL		SPRING
	[waived for pre-professional students]		[waived for pre-professional students]

SECOND YEAR	FALL: Semester 3		SPRING: Semester 4
6	ARCH 8510 Design Studio III	6	ARCH 8520 Design Studio IV (Clemson, Charleston, Barcelona, or Genoa)
3	ARCH 8210 Research Methods	3	ARCH 8730 Environmental Systems
3	ARCH 8720 Production & Assemblies + 8721 Lab	3	ARCH 8620 Architectural History and Theory III
3	ARCH 8810 Professional Practice I	3	Elective (or Structures II: See notes)
15 credits		15 credits	
THIRD YEAR	**FALL: Semester 5**		**SPRING: Semester 6**
6	ARCH 8570 Design Studio V (Clemson, Charleston, Barcelona, or Genoa)	6	Arch 8920 Design Studio VI (Comprehensive Studio)
3	Elective	3	ARCH 8640 Architectural History and Theory IV
3	Elective	3	ARCH 8740 Building Process: Technical Resolution + 8741 Lab
3	Elective	3	ARCH 8820 Professional Practice II
15 credits		15 credits	

60 GRADUATE CREDIT HOURS (+ Bachelor's degree in Architecture with 45 min. NON-ARCHITECTURAL credits) for M. ARCH. Pre-Professional

Certificate Programs

Architecture + Community Build, (In either the M.Arch I or M.Arch II)

Semester 4 (Spring) in Clemson:
The required 6-credit ARCH 8520 Design Studio IV is an A+CB Studio.
The 3-credit elective is replaced with a 3-credit required class, ARCH 8320 Community 1:1

Semester 5 (Fall) in Charleston:
The required 6-credit ARCH 8570 Design Studio V is an A+CB Studio.
The 3-credit elective is replaced with a 3-credit required class, ARCH 6770 Introduction to Craft.

Thus, although the total credits of the M.Arch remain constant, there are only 6 credits of open electives.

Digital Ecologies, (in either the M.Arch I or M.Arch II)
9 credits of elective courses approved for the certificate are required. Thus, although the total credits of the M.Arch remain constant, there are 9 credits of Digital Ecologies electives and only 3 credits of open electives in this certificate program.

The "Fluid Campus": Off-Campus Study Options, Framework, and Curriculum

In order to broaden students' horizons beyond the suburban Clemson campus, the School of Architecture offers semester-long study opportunities in Charleston, SC, Barcelona, and Genoa, as part of our "fluid campus" concept. These facilities are described in greater detail in section 3.I.2.2. Their curriculum frameworks are described below. Students have the option of studying off-campus in the 4th and 5th semesters of the 6-semester Three-Year program. In the off-campus centers, this framework is offered as follows. Note that students may spend one or two semesters off-campus.

M. ARCH.: Off-Campus Options

BARCELONA	**SPRING: Semester 4**		**FALL: Semester 5**
6	**ARCH 8520 Design Studio IV**	**6**	**ARCH 8570 Design Studio V**
3	**ARCH 8730 Environmental Systems**	**3**	**Elective**
3	**ARCH 8620 Architectural History and Theory III**	**3**	**Elective**
3	**Elective**	**3**	**Elective**
15 credits		**15 cr**	
CHARLESTON	**SPRING: Semester 4**		**FALL: Semester 5**
6	**ARCH 8520 Design Studio IV**	**6**	**ARCH 8570 Design Studio V**
3	**ARCH 8730 Environmental Systems**	**3**	**Elective**
3	**ARCH 8620 Architectural History and Theory III**	**3**	**Elective**
3	**Elective**	**3**	**Elective**
15 credits		**15 cr**	
GENOA	**SPRING: Semester 4**		**FALL: Semester 5**
6	**ARCH 8520 Design Studio IV**	**6**	**ARCH 8570 Design Studio V**
3	**ARCH 8730 Environmental Systems**	**3**	**Elective**
3	**ARCH 8620 Architectural History and Theory III**	**3**	**Elective**
3	**Elective**	**3**	**Elective**
15 credits		**15 cr**	

The M. Arch. in Architecture + Health

As noted above, the M. Arch. with a concentration in Architecture + Health is related in structure and credit hours to the general M. Arch. curriculum. In the A+H program, however, students elect to focus on architecture and health studies instead of other areas of concentration. Students make this choice at the time of application to the program, or, more rarely, seek acceptance into the A+H program (which is limited in the number of students that it can serve) after admission to the general program. The M. Arch. with a concentration in Architecture + Health is recognized as a unique course of study by Clemson University and it is recognized nationally as the most comprehensive program in this area of study.

M. ARCH. I in A+H (NON-PRE-PROFESSIONAL + 91 GRADUATE CREDITS)

Prerequisites: Bachelor's degree in any major (including architecture), with at least 45 credits of NON-architectural coursework.

Special Summer Requirement: The A+H curriculum requires a summer internship in Year 2 for a minimum of 1 credit hours.

Thesis Option: The A+H curriculum offers an elective thesis option for qualified students. Below are shown two Third-Year curriculum plans, one for the standard Comprehensive Studio option and one for the Thesis option which also includes the comprehensive development of an architectural project as a demonstration of the thesis.

FIRST YEAR	FALL: Semester 1		SPRING: Semester 2
6	ARCH 8410 Design Studio I	6	ARCH 8420 Design Studio II
3	ARCH 8100 Visualization I	3	ARCH 8110 Visualization II
3	ARCH 8600 Arch. History/Theory I	3	ARCH 8610 Arch. History/Theory II
3	ARCH 8700 Structures I	3	ARCH 8710 Structures II
15 credits		15 credits	
SECOND YEAR	**FALL: Semester 3**		**SPRING: Semester 4**
6	ARCH 8950 A+H Studio: Selected Projects	6	ARCH 8960 A+H Studio: Tectonic Topics
3	ARCH 8210 Research Methods	3	ARCH 6880 Architectural Programming and Pre-Design
3	ARCH 8650 History/Theory of A+H	3	HLTH 6000 Health Policy, Planning and Administration
3	ARCH 8720 Production & Assemblies (online course)	3	ARCH 8730 Environmental Systems
SUMMER			
1 credit min.	HLTH 620 Health Internship		

THIRD YEAR: COMPREHENSIVE OPTION	FALL: Semester 5		SPRING: Semester 6
6	ARCH 8970 A+H Studio: Hospital and Urban Design	6	ARCH 8920 A+H Comprehensive Studio
3	ARCH 8810 Professional Practice I	3	ARCH 8820 Professional Practice II
3	ARCH 8660 Health Facilities Design and Planning	3	ARCH 8740 Building Process: Technical Resolution
3	Elective	3	Elective
15 credits		15 cr	

91 GRADUATE CREDIT HOURS (+ Bachelor's degree with 45 min. NON-ARCHITECTURAL credits) for M. ARCH. in Architecture + Health, Non-Pre-Professional

THIRD YEAR: THESIS OPTION	FALL: Semester 5		SPRING: Semester 6
6	ARCH 8970 A+H Studio: Hospital and Urban Design	6	ARCH 8910 A+H Thesis Studio
3	ARCH 8580 Thesis Research	3	ARCH 8590 A+H Thesis Manuscript
3	ARCH 8860 Health Facilities Design and Planning	3	ARCH 8740 Building Process: Technical Resolution
3	ARCH 8810 Professional Practice I	3	ARCH 8820 Prof. Practice II
15 credits		15 cr	

91 GRADUATE CREDIT HOURS (+ Bachelor's degree with 45 min. NON-ARCHITECTURAL credits) for M. ARCH. in Architecture + Health, Non-Pre-Professional, Thesis option

M. ARCH. in A+H (PRE-PROFESSIONAL + 61 GRADUATE CREDITS)

Prerequisites: Bachelor's degree in architecture, with at least 45 credits of NON-architectural coursework.

Advanced Placement: Pre-Professional students receive advanced placement and waive the first two semesters.

Special Summer Requirement: The A+H curriculum requires a summer internship in Year 2 for a minimum of 1 credit hours.

Thesis Option: The A+H curriculum offers a thesis option for qualified students. Below are shown two Third-Year curriculum plans, one for the standard Comprehensive Studio option and one for the Thesis option.

FIRST YEAR	FALL		SPRING
	[waived for pre-professional students]		[waived for pre-professional students]
SECOND YEAR	**FALL: Semester 3**		**SPRING: Semester 4**
6	**ARCH 8950 A+H Studio: Selected Projects**	**6**	**ARCH 8960 A+H Studio: Tectonic Topics**
3	**ARCH 8210 Research Methods**	**3**	**ARCH 6880 Architectural Programming and Pre-Design**
3	**ARCH 8650 History/Theory of A+H**	**3**	**HLTH 6000 Health Policy, Planning and Administration**
3	**ARCH 8720 Production & Assemblies (online course)**	**3**	**ARCH 8730 Environmental Systems**
SUMMER			
1 credit min.	**HLTH 620 Health Internship**		

THIRD YEAR: COMPREHENSIVE OPTION	FALL: Semester 5		SPRING: Semester 6
6	**ARCH 8970 A+H Studio: Hospital and Urban Design**	**6**	**ARCH 8920 A+H Comprehensive Studio**
3	**ARCH 8810 Professional Practice I**	**3**	**ARCH 8820 Professional Practice II**
3	**ARCH 8660 Health Facilities Design and Planning**	**3**	**ARCH 8740 Building Process: Technical Resolution**
3	**Elective**	**3**	**Elective**
15 credits		**15 cr**	

61 GRADUATE CREDIT HOURS (+ Bachelor's degree with 45 min. NON-ARCHITECTURAL credits) for M. ARCH. in Architecture + Health, Non-Pre-Professional

THIRD YEAR: THESIS OPTION	FALL: Semester 5		SPRING: Semester 6
6	ARCH 8970 A+H Studio: Hospital and Urban Design	6	ARCH 8910 A+H Thesis Studio
3	ARCH 8580 Thesis Research	3	ARCH 8590 A+H Thesis Manuscript
3	ARCH 8860 Health Facilities Design and Planning	3	ARCH 8740 Building Process: Technical Resolution
3	ARCH 8810 Professional Practice I	3	ARCH 8820 Prof. Practice II
15 credits		15 cr	
61 GRADUATE CREDIT HOURS (+ Bachelor's degree with 45 min. NON-ARCHITECTURAL credits) for M. ARCH. in Architecture + Health, Non-Pre-Professional, Thesis option			

A list of other degree programs offered in the same administrative unit as the accredited architecture degree program

BA Architecture, 120 credits

Undergraduate Minor in Architecture, available to students in any bachelor of arts program at the university

MS Architecture, 30 credits (24 credit hours of coursework and directed studies, and 6 credit hours of thesis work)

Ph.D. in Planning, Design and the Built Environment: The School of Architecture's Graduate Program is affiliated with this interdisciplinary PhD program, which is centered in the College of Architecture, Arts & Humanities (AAH).

II.3 Evaluation of Preparatory Education

Admissions
We seek to make the admissions process as clear as possible for applicants and provide extensive information about the admissions process on our website at http://www.clemson.edu/caah/departments/architecture/visit-and-apply/apply-graduate.html.

Applicants submit an electronic application, with supporting attachments, to Clemson University Graduate School, which can be reviewed by admissions committee members. The Graduate School requires all applicants, domestic and international, to have a four-year Bachelor degree with satisfactory general education coursework.

A hardcopy portfolio of creative work is a critical part of the application and is sent directly to the School of Architecture. Portfolios are reviewed by a 7-member admissions committee and scored. Portfolio scores are combined with applicants' GPA and GRE percentile scores to provide an overall ranking of applicants, which is used as a basis for offers of admission, rejection, and waitlists. Gender, geographic, and ethnic diversity is considered in general admissions and waitlist admission considerations.

Student Diversity in Admissions

The school seeks to create an incoming class with no less than 50% women and is careful not to overlook underrepresented demographics.

Advanced Placement

We consider our M. Arch. program a six-semester, three-year program. M. Arch. I students begin in Semester 1; M. Arch. II students begin in Semester 3. In the online application form, applicants indicate if they are seeking advanced placement (i.e., applying for the three-year M. Arch. I track or two-year M. Arch. II track). As indicated on our Graduate Admissions webpage, advanced placement requires a pre-professional degree and the documentation of 6 to 8 semesters of strong studio work. In the algorithm used to generate the applicant ranking, portfolio scores for M. Arch. II applicants are double-weighted (i.e., portfolio score x2 + GRE score + GPA); for M. Arch. I applicants, the GPA and GRE have greater/equivalent weight (i.e., portfolio score + GRE + GPA).

In addition to robust studio work, advanced placement requires prior coursework equivalent or exceeding that of our First Year M. Arch. I coursework. This includes two structures, two architectural history and theory, and two visualization courses, in addition to studios. If the portfolio and application is otherwise strong, applicants without a Structures II course may be admitted, but must take Structures II with M. Arch. I students in place of an elective and off-campus study.

The overwhelming majority of students receiving advanced placement have undergraduate degrees in architecture from well-known and reputable programs which provide substantial preparation in architectural design, visualization, architectural history and theory, and structures, and the SPCs corresponding to those in our First Year courses. The admissions committee chair reviews all matriculating students' transcripts, paying special attention to those from unfamiliar programs.

In many cases, M. Arch. II applicants will not be admitted with advanced placement; in some cases they will be offered admission to the three-year track. The basis of this decision is more often the level of studio work than other coursework. Applicants with prior studies in architectural technology-focused programs, and other programs with six semesters or fewer of design studios, are generally not offered advanced placement; they are generally not competitive for admission or advanced placement with students from more robust preparatory programs.

Letters of admission clearly indicate which degree track is offered. To ensure consistency and clarity, our M. Arch. program uses a Plan of Study showing all six semesters, which allows the candidate to clearly understand the course of study. Our website has extensive information about our M. Arch. programs at http://www.clemson.edu/caah/departments/architecture/programs/graduate/index.html.

II.4 Public Information

II.4.1 Statement on NAAB-Accredited Degrees
See http://www.clemson.edu/caah/departments/architecture/about/accreditation.html

II.4.2 Access to NAAB Conditions and Procedures
See http://www.clemson.edu/caah/departments/architecture/about/accreditation.html

II.4.3 Access to Career Development Information
See http://www.clemson.edu/caah/departments/architecture/about/accreditation.html

II.4.4 Public Access to APRs and VTRs

Interim Progress Report (2013): http://www.clemson.edu/caah/departments/architecture/files/files-about/clemson-naab-interim-report-2013.pdf

Annual Reports (2009, 2012): http://www.clemson.edu/caah/departments/architecture/about/accreditation.html

NAAB responses to Interim Progress Reports and Annual Reports (2009-2012): http://www.clemson.edu/caah/departments/architecture/about/accreditation.html

Most recent decision letter from the NAAB: http://www.clemson.edu/caah/departments/architecture/files/files-about/2011-clemson-naab-apr-final-complete.pdf

Most recent APR: http://www.clemson.edu/caah/departments/architecture/files/files-about/2011-clemson-naab-apr.pdf

Final edition of the most recent Visiting Team Report: http://www.clemson.edu/caah/departments/architecture/files/files-about/2011-clemson-naab-apr-final-complete.pdf

II.4.5. ARE Pass Rates
See http://www.clemson.edu/caah/departments/architecture/about/accreditation.html

II.4.6 Admissions and Advising

Admissions and advanced placement, which are related to evaluation of preparatory education, are discussed in section II.3.

Advising
The directors of the graduate, graduate concentration and graduate certificate programs serve as advisors to M. Arch. Students in their respective programs or certificates.

Advising begins with admissions and placement of students into the appropriate degree track. Due to the competitive nature of the admissions process, students placed into the two-year M. Arch. track with advanced placement are with few exceptions highly capable; they come from strong undergraduate architecture programs and follow the Plan of Study for the next four semesters without any issues. Students without preparatory background in architecture or less strong portfolios may be offered placement in the three-year M. Arch. track; the First Year provides additional skill development for students with prior architectural studies and without.

Student confusion is minimized and academic advising enabled with a clear M. Arch. Plan of Study. Student requirements are clear and elective opportunities, including off-campus study, are clearly delineated; off-campus study options are further explained through websites (http://www.clemson.edu/caah/departments/architecture/programs/fluid-campus/index.html) and informational meetings.

When students are having academic or personal difficulties, advisors provide support. In the rare event when a student is placed on academic probation for having a GPA under 3.0, advisors review avenues for improvement. In the event that a student decides to withdraw from the program, advisors discuss leaves of absence or support without guilt in what is a difficult decision. The numbers of students on academic probation and who withdraw (usually First Year students) is very low, approximately 1 and 2 per year respectively.

II.4.7 Student Financial Information

The highly detailed graduate admissions webpage (http://www.clemson.edu/caah/departments/architecture/visit-and-apply/apply-graduate.html) contains sections about “Tuition and Costs” and “Financial Aid.” Links are provided to university tuition information (http://www.clemson.edu/graduate/academics/tiers.html) and a “Tuition Estimator” (http://www.clemson.edu/graduate/academics/program-details.html?m_id=Architecture-March). Students are also advised that they must consider such expenses as books, drawing and modeling materials, printing costs, and the cost of laser cutter lens (which may be shared with other students). A link is provided for information about educational loans (http://www.clemson.edu/financial-aid/) and information is provided about the opportunities for the School’s competitive assistantships and fellowships.

On a separate webpage is found cost information for our off-campus study programs (http://www.clemson.edu/caah/departments/architecture/programs/fluid-campus/index.html). These costs are competitive with and, for students studying in Barcelona and Genoa, may be less than staying in Clemson; non-resident (out-of-state) students pay the resident tuition rate when studying overseas, and most students receive a subsidy for these programs. Students preparing to study in Charleston are advised that apartment rents are higher than in Clemson.

Section 3. Annual and Interim Reports

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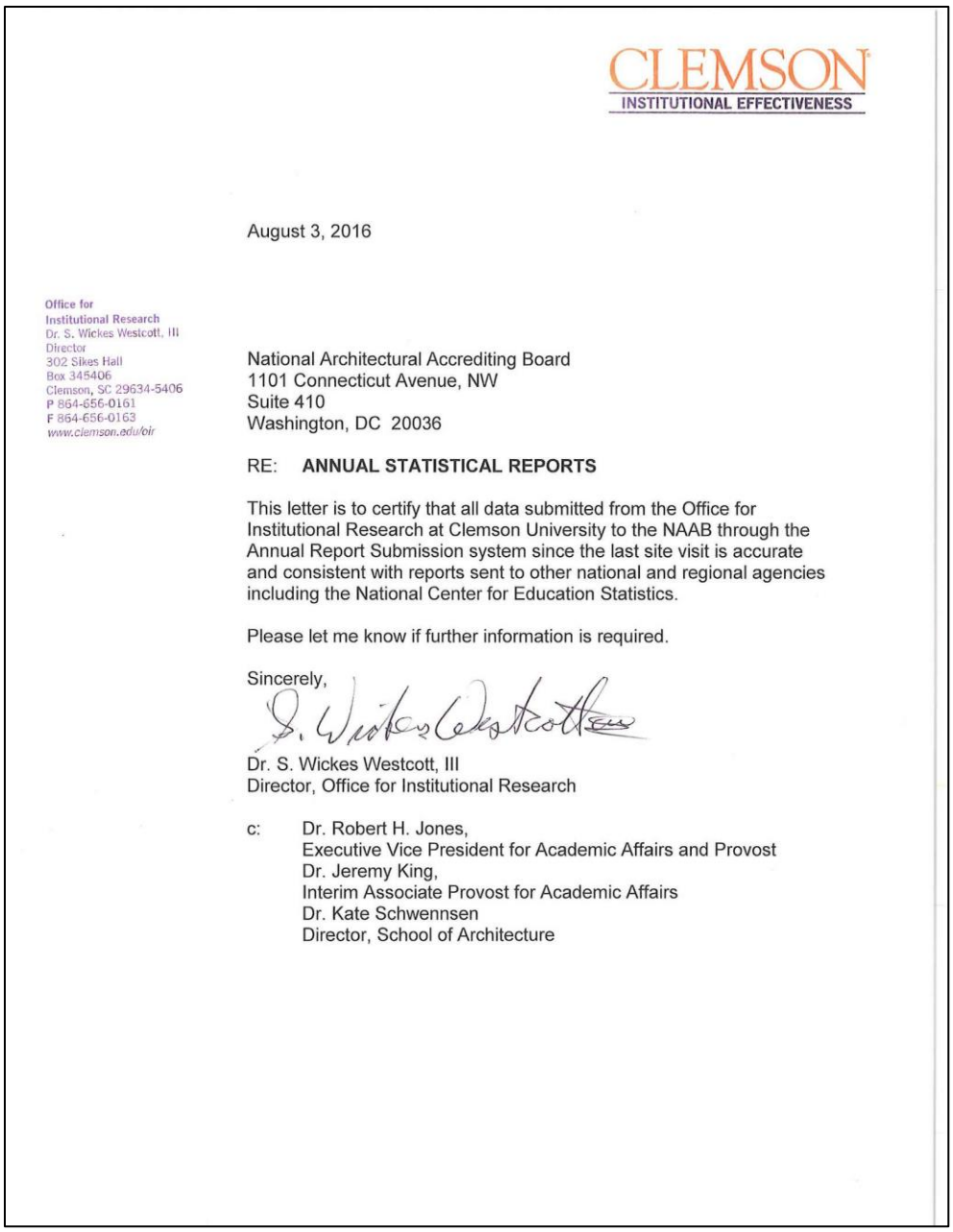

CLEMSON
INSTITUTIONAL EFFECTIVENESS

August 3, 2016

Office for
Institutional Research
Dr. S. Wickes Westcott, III
Director
302 Sikes Hall
Box 345406
Clemson, SC 29634-5406
P 864-656-0161
F 864-656-0163
www.clemson.edu/oir

National Architectural Accrediting Board
1101 Connecticut Avenue, NW
Suite 410
Washington, DC 20036

RE: **ANNUAL STATISTICAL REPORTS**

This letter is to certify that all data submitted from the Office for Institutional Research at Clemson University to the NAAB through the Annual Report Submission system since the last site visit is accurate and consistent with reports sent to other national and regional agencies including the National Center for Education Statistics.

Please let me know if further information is required.

Sincerely,

S. Wickes Westcott

Dr. S. Wickes Westcott, III
Director, Office for Institutional Research

c: Dr. Robert H. Jones,
Executive Vice President for Academic Affairs and Provost
Dr. Jeremy King,
Interim Associate Provost for Academic Affairs
Dr. Kate Schwennsen
Director, School of Architecture

III.1.1 Annual Statistical Reports
https://www.dropbox.com/sh/oa64hksm6i9niup/AADrMWSoc2tP3Fik3_ll8BpRa?dl=0

- **NAAB ARS, Part I – 2013**
https://www.dropbox.com/s/ykc5auwk0q5gvt0/NAAB_ARS_Part_1_ClemsonUniversity_2013.pdf?dl=0
- **NAAB ARS, Part I – 2014**
https://www.dropbox.com/s/oqvmvotvqrtpsed/NAAB_ARS_Part_1_ClemsonUniversity_2014.pdf?dl=0
- **NAAB ARS, Part I – 2015**
https://www.dropbox.com/s/9x59yut93062z67/NAAB_ARS_Part_1_ClemsonUniversity_2015.pdf?dl=0
- **NAAB Annual Report – 2012**
https://www.dropbox.com/s/xy7pti5m9ybysnx/Clemson%20NAAB%20Annual%20Report%202012.pdf?dl=0

III.1.2 Interim Progress Reports
https://www.dropbox.com/sh/o4u6q6yyx6dv9ef/AABL9RjBxydbyZ3yeEcJcYPwa?dl=0

- **NAAB Interim Report – 2013**
https://www.dropbox.com/s/9mqyzwqys774l2q/Clemson%20U%20%20Interim%20Report%202013.pdf?dl=0

Section 4 Supplemental Material - available in separate file:
https://www.clemson.edu/caah/departments/architecture/files/files-about/2016-apr-section4.pdf