Architecture Program Report

The Catholic University of America, School of Architecture and Planning

September 7, 2022

National Architectural Accrediting Board, Inc.

Architecture Program Report (APR)

2020 Conditions for Accreditation
2020 Procedures for Accreditation

Institution	**Catholic University of America**
Name of Academic Unit	School of Architecture and Planning
Degree(s) *(check all that apply)* **Track(s)** *(Please include all tracks offered by th program under the respective degree, including total number of credits. Examples:* *150 semester undergraduate credit hours* *Undergraduate degree with architecture major + 60 graduate semester credit hours* *Undergraduate degree with non-architecture major + 90 graduate semester credit hours)*	☐Bachelor of Architecture Track: ☒ Master of Architecture Track: Master of Architecture 2 Track: Master of Architecture 3 ☐Doctor of Architecture Track: Track:
Application for Accreditation	**Continuing Accreditation**
Year of Previous Visit	2015
Current Term of Accreditation *(refer to most recent decision letter)*	Continuing Accreditation (Eight-Year Term)
Program Administrator	Mark Ferguson
Chief Administrator for the academic unit in which the program is located *(e.g., dean or department chair)*	Mark Ferguson
Chief Academic Officer of the Institution	Aaron Dominguez
President of the Institution	Peter Kilpatrick
Individual submitting the APR	Mark Ferguson
Name and email address of individual to whom questions should be directed	fergusonma@cua.edu

Submission Requirements:

- The APR must be submitted as one PDF document, with supporting materials
- The APR must not exceed 20 MB and 150 pages
- The APR template document shall not be reformatted

NAAB

INTRODUCTION

Progress since the Previous Visit (limit 5 pages)

In this Introduction to the APR, the program must document all actions taken since the previous visit to address Conditions Not Met and Causes of Concern cited in the most recent VTR.

The APR must include the exact text quoted from the previous VTR, as well as the summary of activities.

Program Response:

Note: given the long comments on the previous VTR, this submission runs to 6.5 pages.

Upon receipt of the letter from NAAB about insufficient progress on a number of student-based performance criteria, and recognizing a need for immediate action, the Dean convened the faculty. Together, all firmly resolved a renewed commitment to ensure thorough instruction of these topics. The faculty implemented significant improvements in the spring 2022 semester by identifying and focusing upon required courses for graduating undergraduate seniors and continuing graduate students. This was judged as the most appropriate way of correcting these deficiencies. Specifically, these courses are ARPL 402/602 - *Integrated Building Design Studio (IBDS)*, its supplemental lecture ARPL- 432/632 *Integrated Studio Supplemental (ISS)*, and ARPL 221 - *Pre-Design*.

There were further organizational ways in which we addressed these issues. In the past, these courses were predominantly organized by adjunct faculty drawn from the profession (given their specific, professional content). But beginning in spring 2022–and continuing forward–these courses are being organized, directed, and given lead instruction by full-time, tenured and tenure-track faculty. That is then augmented by adjunct faculty. We felt this was the best way to ensure ongoing adherence to, and fulfillment of, the NAAB's concerns. Additionally, all the adjunct faculty for these courses were selected for their direct, ongoing professional practice expertise so as to bring that experience to the courses, addressing the areas of concern from a mature, professional standpoint.

These courses' contents and their syllabi were re-structured to specifically address the NAAB's concerns. More specific commentary on that will be made below within the specific criteria. Course directors and instructors in all three courses coordinated their efforts in advance by planning and organizing the courses so as to address the concerns along a broad front. Further, these same instructors met at multiple stages during the courses' duration to ensure success in the ongoing efforts. These efforts were openly explained to students in each of the courses. Plans are currently being formed to additionally distribute these improvements to courses in the third year of design instruction as well, in order to provide appropriate reiteration. The nature of these various changes will be most apparent under SC5 Design Synthesis and SC6 Building Integration in the new NAAB nomenclature.

I.2.1 Human Resources and Human Resource Development: Faculty and Staff

The support staff work hard (and they appear to enjoy what they are doing), but the staff are minimal in number for the size of the program. This team is concerned that, because the total number of support staff has been reduced, the school has limited to no support in running the program. The total number of support staff positions was 12 at the time of the last visit. Currently, there are only 4 positions: the assistant dean, shop supervisor, computer technician, and assistant to the dean.

The total number of students in the School of Architecture and Planning during the last visit in 2009 was 504, which was peak enrollment (376 undergraduates and 128 graduates). At this visit, the actual numbers are 233 undergraduates and 111 graduates. With a 75% reduction in staff in

the 6- year period between visits, the team has a concern that the school and, subsequently, the program are not adequately staffed. The focus of our evaluation is on the professional component of the program-the graduate enrollment-and this number has only been reduced by 7 students since the 2008-2009 academic year.

The faculty have concerns regarding course scheduling. Some faculty report that they are not always sure how many students they will have for a course-sometimes during the first few days of class, enrollment doubles from the number initially projected. University faculty recently voted to shorten the student drop/add period so that there would be more certainty with regard to class enrollment numbers at the start of each semester.

Program Response:

Support staffing at the school remains a concern–with further pressures put on this due to financial difficulties the university faced over Covid. Several years ago, the support staff at the school had been slowly rebuilt to a number of 7 (an Associate Dean as chief of staff, a development director, a computer person, a shop person, an Assistant to the Dean, a Registrar, and a clerical staff person). This seemed adequate to the task. But with the university facing further budget cuts, several losses were not replaced. The current count now stands at 5 (a development person, a joint facilities/computers/shop person, an assistant to the Dean, a student engagement coordinator, and a clerical staff person). Student headcount has also declined further, meaning that the staff/student ratio is better than at the last NAAB visit. But this remains a concern. The concern about course scheduling and roster fluctuations we feel has been addressed. There are no further comments of that sort being made.

I.2.3 Physical Resources

The Crough Center is a converted gymnasium with many inefficient spaces, but, as a whole, it is adequate in size for the current needs. The addition of an elevator has made most of the building accessible.

Nevertheless, the building infrastructure is antiquated and inefficient. Industrial bay lighting fixtures are the primary source of studio illumination. They emit a very loud, very distracting noise, and are expensive to operate. Students conducted an energy audit and recommended turning off the lights during daylight hours and using only the natural light. The first year's savings were reported to be about $10,000. Studies indicate that better illumination and greater savings could be achieved by replacing the lighting, wiring, and controls.

Likewise, the uneven, uncontrollable HVAC system is not conducive to teaching or learning. The plumbing is also problematic; a ruptured water line recently caused catastrophic damage to the basement. The woodworking, print, and fabrication laboratories have been recently renovated and reconfigured. New equipment, ventilation, and lighting were installed following the flood mentioned above.

Program Response:

There is much good news to report, and we do now feel that this has been addressed. Many long-standing issues with the building have finally received attention. Since the last accreditation visit, we have invested over $1,250,000 on capital improvements to the Crough Building. A full list of these efforts is given in Section 5. Here, however, we would stress specifically these changes: a full reconditioning of the colonnade at the front of the building and the other entryways, entirely new ceiling lights, wiring, and controls throughout the studios, a full reconditioning of the main bathrooms, and much new computer and woodshop equipment. The university has made substantial progress in getting the HVAC equipment in good working order. We now feel the building is serving us well.

I.2.4 Financial Resources

The financial challenges of the school are directly related to declining student enrollment and the disproportionate number of faculty.

The program reached a high point of enrollment in 2008-2009 at 504 total students (376 undergraduates and 128 graduates). This visiting team evaluated the professional portion of the program: the graduate programs. As mentioned in Section I 2.1 Human Resources and Human Resource Development, there is concern about the inability to fund an adequate number of staff positions to support the program. In 2008-2009, the number of graduate students was one-third of the total enrollment, with 12 total staff members to support the program. At this visit, the staff count is down to 4. The number of staff is inadequate to support the program.

Signs of an enrollment increase are good. The enrollment numbers have increased since last year to 344 total students (233 undergraduates and 111 graduates). The school felt confident that these numbers would continue to go up since the number of applicants has been increasing. The school's goal is a total enrollment cap of 430 students (232 undergraduates and 133 graduates).

At the time of the team visit, a university budget had not yet been approved for next year, which also concerns the team.

Program Response:

The issues surrounding support staffing were addressed above. The student headcount in the school has continued to decline each year, though recently has seemed to level-off. The university's high tuition in an increasingly competitive climate has challenged the program. Regional competitors have become more numerous (a new program in Scranton, PA, for example), as well as more aggressive (WAAC has expanded their program and offerings, as has Jefferson University in Philadelphia, as well as others). Likely, this new competitive climate will continue to present enrollment challenges for the future. In response, the school has given more focus to quality and branding, with less emphasis on outright growth. One good development since the last visit was the university's Academic Renewal program, which offered buy-out packages to numerous senior faculty. This gave our school, particularly, a chance to renew and re-envision itself, with faculty positions becoming open sooner than expected. As one manifestation of that, the school was able to launch 4 searches for tenure-track faculty this year (that is still being worked through as of this writing, with three new faculty joining the program as of this writing).

I.3.1 Statistical Reports

Statistical Reports are provided. However, not all of the required information is available or easily accessible. Extensive demographic information is provided. However, no comparative data is provided to gauge the changes in demographics during the period since the last team visit. While it is possible to obtain information regarding the changes by comparing the reports from 2009 and from this year, the changes are too complex to allow a useful, comparative reading. More data needs to be provided to allow better analysis of trends that gauge the effectiveness of the social equity policy. The team did not find data on the percentage of matriculating students who complete their degree program within the normal time to completion or within 150% of the normal time to completion. While extensive data was provided on the demographics of the faculty, comparative data between this visit and the 2009 visit was not provided. No data was provided on the number of faculty receiving promotion or tenure. Data is provided on the number of faculty who have licenses in U.S. jurisdictions. However, little data is provided on where they are licensed.

Program Response:

We feel we are now providing adequate information.

II.2.3 Curriculum Review and Development

The school's 2015 APR describes the process by which the curriculum for the NAAB-accredited degree program is evaluated and how modifications are identified, developed, approved, and implemented. Licensed architects are included in the curriculum review and development process, and the involvement of adjunct faculty assures that students are exposed to current issues in practice. While the process is defined, it does not appear to be uniformly implemented. The failure seems to be a lack of coordination of core content in non-studio classes. Anecdotal evidence of course content being repeated in successive classes concerned the team, as did reports of syllabi not being shared among faculty resulting in often redundant course content. The program strengths are in the range of unique concentration options in Tracks I and II. These concentrations include: Urban Practice, Real Estate Development, Emerging Technologies and Media, and Cultural Studies and Sacred Space. However, students reported a lack of coordination among the concentrations and the lack of a holistic vision.

Program Response:

To some degree, the university's Academic Renewal process assisted in the handling of the problems NAAB cites here. Five senior faculty took buy-out packages, removing them from our curricular management process. This considerably smoothed the program's ability to implement and track curricular changes, and improved overall conformance. We do not feel these issues of redundancies and inefficiencies persist. Also of assistance in implementing the curriculum in architecture was the closing of the planning program and the facilities management program. Given dropping student counts in those areas and related financial strains, they were consuming too much administrative time and too many resources. That time is now available for focus on the core architecture program and its delivery. We are much more streamlined now in our approach.

B.1 Pre-Design

Student work and supporting material in ARPL 602 and ARPL 632 (an elective) reflect an understanding of this criterion, but not an ability to perform the requirements of the criterion.

Program Response:

More study of programming has been incorporated through ARPL 221 - *Pre-Design*. More control has been set across the design curriculum for studio courses regarding this objective. In ARPL 402/602 - *Integrated Building Design Studio*, students were required to develop the project program themselves. Lectures and work sessions were dedicated to programming objectives and methods and were presented by practicing professionals. Students' Project Programs were made a required deliverable for the course. Also in ARPL 402/602 - *IBDS*, a real site was selected in Washington DC, so that students would visit, tour and analyze the site in person. Tours were given by each studio professional to demonstrate on-site site analysis. Lectures and demonstrations were given (in ARPL 432/632 - *ISS*) and workshops were conducted (in ARPL 402/602 - *IBDS*) so as to instruct students in research, site topography, utilities, building location and orientation, and in architectural, urban, civic, and cultural contexts. All of these were then shown to the students as impacting Programming, Code Analysis, Sustainability Strategies, General Mobility/Life Safety and Universal Design. Regarding code analysis, a real site was selected in Washington, DC also so that students would be held to an established, referenceable Zoning Code and enacted construction codes. Both Zoning and Construction Code Analysis was undertaken very early in the course so that these analyses would beneficially contribute to the students' Programming efforts. Construction Code Analysis was thereafter an on-going component of the design phases throughout the studio course. Regarding sustainability strategies: Aa a forward-looking municipality, Washington DC is one of a few cities that has an

enacted a Green Construction Code, a code requiring sustainable design. While sustainability strategies are also stressed elsewhere in the program, this past year ARPL 402/602 - *IBDS* and ARPL 432/632 - *ISS* were changed to directly address integration of sustainable design as a requirement for course success. Green Construction Code Analysis was undertaken very early in the course so that these analyses would beneficially contribute to the students' Programming efforts and was thereafter an on-going component of the design phases throughout the studio course. Lectures and demonstrations were given (in ARPL 432/632 - *ISS*) and workshops were conducted (in ARPL 402/602 - *IBDS*) so as to instruct students in design integration of sustainable design in compliance with enacted code.

B.2 Accessibility

This criterion is Not Met. Projects in ARPL 402/602: Comprehensive Building Design Studio (CBDS) and throughout the program do not provide evidence of student ability with regard to the accessibility requirements of this criterion.

Program Response:

Specific attention was given to this, using both ARPL 402/602 - *IBDS* and ARPL 432/632 - *ISS*. These courses now fully reflect the accessibility and mobility challenges that public building design must address. Accessibility Codes, the IBC, the A.D.A. and Universal Design principals were presented with the requirement that the student's projects must be shown to comply at a minimum with the enacted Washington, DC Code. Even more, the principals of Universal Design were held as higher goals for students to attain whenever and wherever possible. Special attention was given to corridor widths, door approaches, door widths and swings, restroom design, office layout, elevator locations and sizes, ramp design requirements, and sloped sidewalks. In conjunction with the issues of general mobility set forth above, all this was communicated to the students by means of detailed code analysis, lectures and demonstrations (in ARPL 432/632 - *ISS*), and in-studio workshops (ARPL 402/602 - *IBDS*) so as to instruct students in design accommodation and adjustment to incorporate and comply with established accessibility codes and goals. Furthermore, once these matters were taught, students were shown how they correctly inform both pre-design, code-analysis, programming and site design efforts that form parts of all design projects. We feel this criterion is now being met.

B.5 Life Safety

This criterion is Not Met. While selected projects in ARPL 402/602: Comprehensive Building Design Studio (CBDS) illustrate this ability, the team found little evidence that life safety is consistently taught to students at the level of ability required by the criterion.

Program Response:

ARPL 402/602 - *Integrated Building Design Studio* has changed the way it approaches this topic. The project site, the proposed building's size, and its use were all intentionally selected to present the course's students with serious challenges to solve and also to increase their awareness of the critical importance of occupants' mobility and life safety. For example, this past year's selected site slopes across its length at least 4 feet vertically, making the entry level something to be addressed at the very outset of both site and building design. The number of floors required to meet the project's objectives necessitated a design strategy for all vertical circulation including but not limited to the life safety egress stairways; the size of the building footprint brought limitations of horizontal egress pathways into consideration; occupancy calculations by floor impacted egress stair widths and required areas of refuge; stair locations and their exits to the buildings' exteriors impacted architectural design aesthetics and composition. All this was communicated to the students by means of detailed code analysis, lectures/demonstrations (ARPL 432/632 - *ISS*), and in-studio workshops (ARPL 402/602 - *IBDS*) so as to instruct students

in design accommodation and adjustment to incorporate and comply with established life-safety codes. We feel this criterion is now being met.

B.7 Financial Considerations

This criterion is Not Met. The program needs to address understanding financial considerations as they relate to building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting, instead of focusing on the financial considerations of an architectural firm's practice. In the course binders for Track I and Track II, ARPL 722: Practice Management, there is not enough evidence to illustrate an understanding of this criterion.

Program Response:

In addressing cost estimation by students, our ARPL 632 - *IBDS Supplement* course was judged the best venue, given its lecture/demonstration format. As part of that course, students were asked in an open-format question-and-answer session (conducted by a practicing architecture firm principal) to identify different kinds of costs associated with an architectural project. Filling the chalk-board the student-identified costs categories were then individually discussed and categorized as either a “Project Cost” or a “Construction Cost”. Pertaining to construction cost estimation, students were instructed on an approach of ‘dollars-per-square-foot basis’ common with design professionals (as opposed to a materials and labor take-off approach appropriate to contractors). Students used their own designs to analyze them for varying construction costs per square foot; breaking their projects down by cost per area to develop a base-line cost budget. Also discussed at length were contingencies and their uses. All this culminated in a demonstration of how all the cost categories impact one another and form part of an overall Project Cost Budget. Because design drawings are not good means of demonstrating understanding in cost estimation, students were tested on their comprehension of the above tasks, in order to demonstrate their understanding of cost estimation. Please see that course folder.

Causes of Concern:

Human Resources

The visiting team supports maintaining the program's unique multi-disciplinary faculty, even during transitional budget and enrollment stabilization:
There is concern that the tenure-track faculty do not have adequate resources to support scholarship travel needs (faculty report a number of instances of out-of-pocket expenses to support trips). The adjunct faculty support the reconfigured comprehensive design experience by providing vital professional role models for students. Students consult with the outside firms of these faculty members to improve building design projects and to establish summer internship and future employment connections. Therefore, the reduction in funding for hiring adjunct faculty is of concern. There is a need to restore core support staff for the program in order to stabilize it: There is an immediate need to fill the two staff positions recently vacated and a need to provide release time for faculty to assist with student advising. As the program awaits new staff hires, the associate deans are dealing with advising, scheduling, contract writing, registration, and graduation requirements. The team is concerned because the support staff have been reduced from 12 staff in 2008-2009 to 4 at the time of the current visit, and to 6 when the new positions are filled. The current support staff are Assistant Dean August Runge, Shop Supervisor Davide Prete, Computer Technician Daryoush Ghalambor, and Assistant to the Dean Pat Dudley.

Program Response:

Our fundamental response to this was given above in I.2.1 Human Resources. Additionally, we now feel that faculty development funds have been rendered

Physical Resources

Repair of the facility's deferred maintenance items is needed (these items were also cited in the 2009 VTR):
The team has health and safety concerns regarding the HVAC's extreme temperature fluctuations, which create difficult working conditions within the space.
The buzzing lights, given the high use of the design studio spaces, are a distraction and an annoyance to students, faculty, and visiting critics, and disrupt the quality of the educational experience.
The upgrade of the dust collection/ventilation system for the lower-level support shop is needed as an immediate fix to mitigate the migration of fumes from material cutting on the lower level to the upper level of the building. Moving the dust collection system outside the building would allow more students to use the equipment.
Faculty and staff have been provided with an annual budget of $2,000 for career development. Additionally, research stipends for peer-reviewed proposals in amounts between $5,000 and $15,000 for peer-reviewed proposal

Program Response:

Our fundamental response to this was given above in I.2.3 Physical Resources. The light fixture noise and HVAC issues have been resolved. Dust problems no longer occur with our newer systems.

Digital-Network Infrastructure

The digital-capacity needs of this professional program exceed the university's standard levels. The digital-network system is woefully inadequate for accomplishing many of the requirements of the courses: The network speeds for the file sharing of digital files is too slow. The faculty email capacity of 2GB is too low.

Program Response:

These issues have been addressed. File sharing speeds have increased; no subsequent complaints have emerged. The change, campus-wide, to Google Mail has resolved the email capacity issues.

Long-Range Planning

Moving forward with the inclusion of the Department of Art within the School of Architecture and Planning could improve multidisciplinary linkages. This opportunity has the potential to strengthen the foundational and historical roots of architectural education in the visual arts, as long as the logistics of this move can be resolved. Reinstating the ½ time development staff position, formerly shared with the School of Engineering, will assist the School of Architecture and Planning in moving forward with fundraising efforts. More assistance is needed from the university to manage enrollment, marketing, and public relations for the school. Assistance in promoting the school's unique aspects will help with future enrollment. The faculty were quite frustrated by the lack of support for providing press releases for events and for handling the acknowledgements received. In terms of increasing future enrollment, and possibly integrating the Department of Art, expansion of the physical facility will need to be explored.

Program Response:

The campus made the decision to incorporate art into a newly reconfigured school including music and drama as opposed to incorporating it into architecture. Thus that issue is moot. The school now has a full-time, dedicated director of advancement. This is a substantial upgrade for the school, which has been very beneficial. The university has put considerable resources toward

recruitment, and we feel well-served there now. The school is looking at the possibility of a dedicated staff hire for marketing, specific to our discipline.

Curriculum and Development

Students expressed frustration over the fact that no one seemed to be overseeing all four concentrations of Tracks I and II of the Master's program, and, as a result, there seemed to be overlaps in course content. Academic requirements for concentration areas seemed, at times, to be too restrictive and prevented students from participating in other opportunities in which they might be interested (e.g., travel opportunities). This team supports the students' interest in having the school develop core courses and in allowing more flexibility that extends across all concentration areas. In addition, student frustration with syllabi that are changing and late and with the lack of access to grading rubrics continues.

Program Response:

The entire graduate program is now supervised by one person, the Associate Dean for Graduate Studies. This, we feel, has resolved many of these issues of coordination. Specific grading rubrics are now a required part of all syllabi.

Program Changes

Further, if the Accreditation Conditions have changed since the previous visit, the APR must include a brief description of changes made to the program as a result of changes in the Conditions.

This section is limited to 5 pages, total.

Program Response:

Our major change regarding how the accreditation conditions have evolved is reflected in our attitude toward assessment–a current emphasis nationally in accreditation efforts across all disciplines. For example, the program instituted a regular, year-end review of all studios to ensure that the curriculum's needs are being met–and evenly–in all studio sections and year levels. This included visual presentations by each studio coordinator of work from all sections occurring under their supervision. This review process included not just studio faculty, but the entire faculty of the program, opening the opportunity to discuss how other areas of the curriculum can be better integrated into studio education. Also, critically, it included a good number of our adjunct instructors from the profession, who provide an important percentage of our studio education. The first iteration of this process was, we feel, successful and pointed up numerous areas where the commentary recently from NAAB (the letter noting that we were not making sufficient progress) had already been fully addressed. This gave the program needed reassurance. We also have encouraged and seen over the past 18 months greater coordination of various studio sections within each studio year level. This was also very apparent within this general review process.

Further, greater emphasis was placed on general issues of syllabus conformance. This effort was led by the two academic Associate Deans (undergraduate and graduate). All syllabi were actively reviewed by them prior to loading onto the university's mandatory website for syllabi. Detailed commentary was made on each syllabus and a response requested from faculty. This, we feel, led to much greater regularity in how we handle syllabi. a particular area of focus was making sure that all NAAB conformance aspects were clearly stated on each individual syllabus. Attention was also given to grading rubrics and other areas that enhance assessment.

As regards NAAB's reduction of the many previous criteria into a much smaller set, we did not implement widespread, fundamental changes to our curricular structure in response. To some degree, we feel we had been a national leader some years ago in how we have managed two classes in particular (ARPL 402/602 and ARPL 432/632) to give dedicated coverage to areas that have now with NAAB become consolidated into SC.5 Design Synthesis and SC.6 Building

Integration. In prior APR's, we had to parcel out the content of those courses across many and varied performance criteria in a rather arbitrary way, treating a necessary student skill set that we saw as highly synthetic and integrative in its character as instead divided into myriad discrete buckets of performance. The new NAAB format allowed us to represent that aspect of our curriculum in a much more direct and effective way. That is now clearly represented on our newly revised chart, which shows these two courses focused upon those consolidated criteria alone. This has made the synthetic and integrative into what they should indeed be: synthetic and integrative.

In response to PC.3 Ecological Knowledge and Responsibility, we did implement an entirely new, required course: APRL 383 Ethics + Stewardship. This synthesized a longstanding proclivity in the program about bringing aspects of sustainability together with our schools and our campus's larger mission of service to God and country, from an ethical perspective. In this course we consolidated a series of more disparate treatments of this subject that had been more widely dispersed across the curriculum. The unique faculty roster for this new course was, from the outset, very multidisciplinary, giving us the purview to address these issues in a very unique way. Many campuses would not even have faculty in the particular areas that we were able to draw from–so that is one inherent advantage we do have. We feel that this new course, too, makes us a national leader here, specifically. It is our view that the elevation of this subject into being one of just a few specifically cited program criteria by NAAB is the right decision and addressed a need nationally that had been apparent for some time.

A change that has been underway at the school for some years is the Classical Architecture and Urbanism Initiative–duly reported upon to NAAB several times through our interim reports. Our attitude toward this initiative has been, again we feel, innovative in that we maintain a mix of modernist design methodologies in addition to this new emphasis on classical (or, if one prefers, 'traditional') design. This has had impacts on the curriculum, such as another new, required course, ARPL 241 - *Theory of the Orders*.

NAAB

NARRATIVE TEMPLATE

1—Context and Mission

To help the NAAB and the visiting team understand the specific circumstances of the school, the program must describe the following:

The institutional context and geographic setting (public or private, urban or rural, size, etc.), and how the program's mission and culture influence its architecture pedagogy and impact its development. Programs that exist within a larger educational institution must also describe the mission of the college or university and how that shapes or influences the program.

Program must specify their delivery format (virtual/on-campus).

Program Response:

The School of Architecture and Planning at The Catholic University of America exists on a distinctive private university campus having a very particular mission. In 1866, the Bishops of the United States, who were interested especially in the higher education of the clergy, expressed a desire to have under Catholic auspices a university in which "all the letters and sciences, both sacred and profane, could be taught." There had been demands for such an institution in prior decades to serve American Catholics. A decision to found The Catholic University of America was made by the bishops in 1884. Pope Leo XIII, a source of encouragement from the beginning, gave formal approbation in 1887. A certificate of incorporation was then registered in our nation's capital, the District of Columbia. The university opened in 1889 in what is now Caldwell Hall, beginning with an enrollment of thirty-seven students of the sacred sciences. A particularly visible early contribution of the university to the Church in the United States and to the nation at large was preparation of teachers, many of them diocesan priests or members of religious communities of men and women, for service in schools, seminaries and colleges throughout the country.

Distinctively, the university's origins were in graduate education, following the example of the 19th-century Prussian universities. Although some Catholic colleges of the period in America announced graduate offerings in the 1870s, they defined these by adding courses rather than by the research that graduate work in universities truly entails. By 1900, along with 13 other institutions offering doctorates, The Catholic University of America participated in forming the Association of American Universities. Undergraduate programs were only added to the campus in 1904.

Expansion into the arts and sciences began in 1895 with the opening of what were called at the time the "faculties for the laity." The School of Law was established in 1898. In 1930, the Graduate School of Arts and Sciences was established, along with the School of Engineering and Architecture. Numerous other schools followed.

Today, the full roster of schools is:

School of Architecture and Planning
School of Arts and Sciences
Tim and Steph Busch School of Business
School of Canon Law
School of Engineering
Columbus School of Law
Benjamin T. Rome School of Music, Drama, and Art
Conway School of Nursing
School of Philosophy
Metropolitan School of Professional Studies
National Catholic School of Social Service

Undergraduates are admitted to six of the schools, including architecture. A common admissions authority administers the same general standards to all these. Metropolitan College also admits undergraduates (employing criteria appropriate for the non-traditional student). About 60% of today's students are undergraduates. The remaining 40% are graduate students, with roughly two-thirds of them in the professional schools. The total campus enrollment currently is 5049. Further information about the history of the institution and about its facts can be found using these links:

https://www.catholic.edu/about-us/at-a-glance/history.html

https://communications.catholic.edu/special-projects/by-the-numbers.html

The special origin of The Catholic University of America is directly reflected in its mission. The first rector, Bishop John Joseph Keane, gave succinct form to these goals when he portrayed the institution that he was chosen to head as "a living embodiment and illustration of the harmony between reason and revelation, between science and religion, between the genius of America and the church of Christ." His words have been a guide for a century and will be a continuing challenge as long as the university endures. The goals of the founders of more than a century ago have carried through many statements of the institution's purpose. Today's 'Mission Statement' of The Catholic University of America reads:

As the national university of the Catholic Church in the United States, founded and sponsored by the bishops of the country with the approval of the Holy See, The Catholic University of America is committed to being a comprehensive Catholic and American institution of higher learning, faithful to the teachings of Jesus Christ as handed on by the Church. Dedicated to advancing the dialogue between faith and reason, The Catholic University of America seeks to discover and impart the truth through excellence in teaching and research, all in service to the Church, the nation and the world. (Approved by the Board of Trustees, December 12, 2006)

https://www.catholic.edu/about-us/at-a-glance/index.html

Today, the broad outlines of CUA's mission are guided by the *Ex Corde Ecclesiae* (meaning from the heart of the Church, an apostolic constitution issued by Pope John Paul II regarding Catholic colleges and universities in 1990).

In the context of 21st century education, the Mission specifically references the dialectic of faith and reason—a recognition of the increasing role of instrumental rationality in day-to-day life, and of the university's effort to interface with that reality. Pragmatic disciplines such as Engineering and Nursing have long been part of the community, but recent direct expressions of that effort are the university's rising research agendas in the sciences (particularly the Vitreous States Laboratory), and the establishment of a Business School.

In addition, there are detailed statements of 'Aims' and the 'Goals' of The Catholic University of America. While too long to present here, these are available in full on the internet and give more information about the university's purpose and its strategies for actualizing those.

https://www.catholic.edu/about-us/at-a-glance/aims-and-goals.html

Particularly important aspects for our school of those documents is the component of the aims stating that the university wishes an environment "where freedom is fostered and where the only constraint upon truth is truth itself" and also where it seeks "continuing reflection, in the light of Christian faith, upon the growing treasure of human knowledge." Further, the documents continue by saying: "Through its professional programs, the University seeks to educate men and women

who can represent their respective professions with distinction and who are formed by the learning and values inherent in its academic and Catholic traditions." We in the school seek to manifest these particular aims quite directly.

The geographic setting of the campus is also distinctive and has direct impacts upon our school. The verdant 176-acre campus—the largest in acreage in The District of Columbia—is a few short Metro stops away from Capitol Hill, giving widespread easy access to all of the well-known educational, cultural, and political opportunities of the nation's capital and larger region of nearly 6 million people. The Metro line on which the campus stands (the 'Red Line') is one of the most extensive within the system, and provides immediately access to a considerable diversity of urban environments, including Union Station (the region's major heavy rail and bus travel hub), the National Mall (particularly the National Gallery, Smithsonian, and White House), the National Building Museum, the downtown central shopping and business district, and on through more distantly to Chevy Chase, Bethesda, Silver Springs, Rockville and other thriving communities.

The context of Washington DC, both architecturally and in terms of urbanism, is truly distinct. Many of the most renowned architectural monuments in the city are of the classical style. Traditional stylism, for two hundred years, has been a major emphasis here. Our environment provides an outstanding laboratory for the study of architectural traditionalism, incorporating major works by John Hoban, Benjamin Henry Latrobe, Robert Mills, James Renwick Jr., John Russell Pope, Henry Bacon, Daniel Burnham, Paul Philippe Cret, Cass Gilbert, and many others too numerous to mention. Modernism has not been ignored; major works exist here by Gordon Bunshaft, I.M. Pei, Maya Lin, Moshe Safdie, Lawrence Halprin, Steven Holl and David Adjaye. Further, the city and regional planning efforts of the area are as distinct. This begins with the internationally significant original urban design work of Pierre Charles L'Enfant in laying out the new capital city's center. That underwent extension and transformation under the later eye of the McMillan Plan designers. It also is augmented by other distinctive efforts in the region creating truly significant smaller urban fabrics, such as Georgetown, Alexandria, Reston, and Kentlands. Several extraordinarily vibrant 'edge cities' reflecting contemporary urbanism have also developed over the past several decades, including Bethesda and Arlington. Significant examples of recent planning also include major developments at National Harbor and the riverfront along Southeast DC. Many of these can be reached from campus via Metro.

Further, the campus's immediate neighborhood, Brookland, has undergone considerable rebirth over the past decade, beginning with the university's participation in the urban planning and construction of a dense 'campus town' district of shops, housing, and arts venues on immediately adjacent properties (once owned by the university). The initial pieces were seven-story condominium buildings and four-story townhomes. All these properties had outstanding proximity to our own Metro stop—'CUA Brookland'. This foundational effort of revitalization has gradually transformed the entire area. Substantial private investment has occurred, making the immediate neighborhood a viable living choice for many campus constituents. This was much less the case even ten years ago. A multitude of restaurants, cafes, bookstores, and related retail outlets have opened. This activity—and particularly the 'Monroe Street Market' area of artists' lofts and studios—has suddenly made Brookland a unique place to visit within the metropolitan region. While all of this construction was underway, our students in architecture had a visible example of urban regeneration right in front of them. In addition, similar, if less distinctive, revitalizations are occurring at immediately adjacent Metro stops on both sides of the Red line, particularly at the Rhode Island Avenue, NoMA, and Fort Totten stops. Our campus surroundings have changed fundamentally since NAAB last visited the school.

The campus itself continues to evolve, architecturally. Recent construction projects include a new dining hall (now being completed) and a new nursing school (just underway). These campus additions, as well as the 'campus town' across Michigan Avenue, have been consciously designed in the 'traditional' style, augmenting the impressive array of historical Neo-Gothic structures that form the university's current frontage and also a somewhat older group of

venerable Neo-Romanesque buildings in the interior. Over time, the university has gradually seen the advantage of selecting increasingly nationally renowned architects to construct buildings (the new nursing building, for example, is by Robert A.M. Stern Architects, LLP). The school was welcomed to the table as these recent decisions were being made (the dean, for example, sitting on the panel of the nursing school's architect selection process).

The campus's immediate proximity to Metro—and also particularly our school's close position on campus to it—has made us the most reasonable option for architectural professionals from downtown or other communities who wish to teach at an NAAB accredited design school. It literally brings the region's expertise to our doorstep, and swiftly. It also has allowed our students to easily have internships almost anywhere within the region's vibrant and diverse practice environment. This gave us confidence in the success of many new educational initiatives, such as the launching of a sizable IPAL program.

The school's Mission Statement was recently revised and updated. We say revised, as opposed to new, as the prior document was still viewed as timely. Our school mission reads:

The School of Architecture and Planning at The Catholic University of America is dedicated to the professional education of those who will plan, design, build, and conserve the built environment. Utilizing its remarkable location in the nation's capital but also other international cities as learning laboratories, the school provides an enriching educational climate in which students investigate the realms of planning, design, theory, building, and sustainability within the context of the world in which we live.

As architecture and planning must respond to the needs and aspirations of our society, the architect and planner today must understand the nature of the human being in time, space, and culture. As a school within the national university of the Catholic Church in the United States, our principles are critically informed by the ethical, religious, philosophical, and societal potentialities of our discipline. Specifically, this translates into the study of the three relationships at the heart of all human habitation: our relationship with others (Social dimension), our relationship with the environment (Stewardship dimension), and our relationship with God (Sacred dimension). The attitudes, values, skills, and knowledge embedded in these dimensions are pursued through a philosophy devoted to the integration of artistic creativity, intellectual curiosity, technical acuity, cultural diversity, and spiritual maturity. In doing so, we aim to cultivate a holistic view of architecture, planning and design so that students, future architects and planners, can assume a personal responsibility for the beauty, equity, and well-being of the world. Our ultimate goal is to forge inspiring contemporary attitudes toward Building Stewardship for society at large.

We are thus committed to providing leadership and innovation in Building Stewardship by engaging in teaching, scholarship, practice, and service informed by our social, spiritual, and environmental concerns.

https://architecture.catholic.edu/about-us/mission/index.html

This mission reflects numerous aspects of context, both institutional and geographic, mentioned above. The university's mission impacts our school's emphasis on larger society and its needs—hence our emphasis on ethical, religious, philosophical, and societal concerns. Unlike most schools of architecture and planning in the country, we engage and celebrate our relationship with God as an important dimension of our formulation of Building Stewardship. It appears directly in our emphasis on how humanity can be a good steward of our globe's future, for the sake of all humankind. We in fact ran somewhat ahead of the trend there, taking a major position in sustainability coursework, for example, over a decade before Pope Francis's 2015 encyclical on the environment, *Laudato si'*. Our faculty member in this area of study has completed several recent books on the subject. Further, we maintain the only M. Arch degree track nationally with a concentration in Sacred Space/Cultural Studies. This concentration gives rise to several courses

which we feel are unique offerings. Our Walton Critic program has brought world-renowned experts in this area of study to our campus for studio courses. These have included Daniel Libeskind, Juhani Pallasmaa, Alberto Campo Baeza, Prem Chandavarkar, Rick Joy, Trey Trahan and others. The concentration is led by a nationally recognized expert on the sacred within architecture. Further, we have over the past eight years begun a new initiative in the area of 'Classical Architecture and Urbanism', which has now resulted in a graduate concentration. The initiative is also present at several year levels of the undergraduate program. Our intentions here are manifold, but one impetus related directly to our campus's mission. The Roman Catholic Church has perhaps the largest stock of existing, high quality, traditional or classical monuments on earth. We seek to train students who can interface productively with that considerable heritage and expand that language's use in contemporary society. The concentration is led by a nationally recognized expert in Catholic Church design. Beyond these initiatives of the school, our program is also unique given that our undergraduate students take a roster of university-wide coursework (philosophy, religious studies) quite different from what one might encounter at a typical state school program; thus, our curriculum contains a credit count beyond the norm by several classes.

Our mission also clarifies that we see Washington, D.C., and the larger metropolitan region, as a learning laboratory: Our mission resonates powerfully within our nation's capital. We encourage a hands-on immersion in the reality of stewardship. We embrace our city and its diverse metropolitan area through its federal governmental agencies, funding organizations, arts and museum groups, local universities, and international governments and institutions. Our new emphasis on Classical Architecture and Urbanism also relates directly and powerfully to our context. Washington DC is, contextually, perhaps the best place in the country to conduct such dedicated study.

Our belief is that we are all stewards of the built environment. Architects and planners have the skills to forge a true difference in humanity's future. In the context of 21st century education, this mission offers a decisive view of what design education could be over the next several decades at our school.

In July of 2020, a new Dean joined our school, Mark Ferguson. Under his leadership, we have reaffirmed and continued in the quest laid out in this mission.

The program's role in and relationship to its academic context and university community, including how the program benefits–and benefits from–its institutional setting and how the program as a unit and/or its individual faculty members participate in university-wide initiatives and the university's academic plan. Also describe how the program, as a unit, develops multidisciplinary relationships and leverages unique opportunities in the institution and the community.

Program Response:

University Context: The School is an important factor in the campus's overall enrollment—approximately 5% of the entire university. This is considerably larger than design schools typically at many private and public institutions. While the entire campus's enrollment has trended down over the past decade, and Architecture and Planning has as well, this essential percentage has not changed considerably. Our relatively large size on campus compared to national norms ensures that the school plays a significant role in the university as a whole.

Our major reciprocal involvement with another campus school is our joint Bachelor of Science in Architecture and Bachelor in Civil Engineering (B.S. Arch./B.C.E.) initiative. This is very long-running and popular, despite being incredibly intense as a five-year array of coursework (187-credit-hour). In some years, as many as half of our incoming undergraduates select this option (the proportion declines somewhat after freshman year, as the rigors of the track become more apparent). It allows a student to complete two challenging undergraduate degrees with only a

single additional year of study. Our strong connections with Engineering reflects our School's origin: we spent the first 75 years of our existence as a department within Engineering.

Many other such involvements exist, such as a symposium with the cooperation of the Nursing School on April 28th of 2016 on issues facing Facility Management and Aging in Place for the Catholic Church's parishes.

Many faculty also are leading research and teaching efforts involving other schools. Professor Bermudez, for example, has been working with professors and students from Theology and Religious Studies on a Templeton Religion Trust grant for the past several years, and with Campus Ministry and the adjacent Basilica of the National Shrine of the Immaculate Conception for recruiting subjects for research on the neuroscience of sacred space.

The School is represented on the major academic decision making groups of the campus. Both the Dean and an elected member of our faculty serve on the campus's Academic Senate. The Dean attends the Dean's Council, and the two Associate Deans attend the Graduate Board and the Undergraduate Board. It also occasionally occurs that a member of our faculty serves a three-year term on the University 'CAP Committee' (Committee on Appointments and Promotions), which has an impact on campus-wide tenure decisions. Further, the contributions of the School to campus-wide built initiatives recently has already been described.

Architecture and planning students participate in many aspects of campus life, including student governance, clubs, athletics, and religious observances. Our students utilize various campus resources, such as the Learning Center, Disability Support Services, and the Center for Cultural Engagement, the Counseling Center, the Intensive English Program, Student Health Services, and the very vibrant Campus Ministry. The latter holds many retreats (such as the Freshmen Retreat, and the Women's Retreat), religious worship services, and spearheads an enormous effort of community service. It is not unusual for our students, for example, to be involved in mission trips internationally. Given the inherently international nature of a city like Washington DC, the campus has an office for Global Education (CUAbroad), which interacts not only in assisting our school's international students with visas and other requirements, but also runs our Rome Campus and various other international programs.

Faculty also make use of university resources, particularly CUA's Center for Teaching Excellence. This is a major resource for faculty on teaching methods (this has been a particularly important resource during the pandemic, with the university shift to on-line modalities, and also with the increase generally in the use of platforms like Blackboard). Faculty members also interact frequently with CUA's Office of Sponsored Research, which handles grants. CUA's Facilities Maintenance and Operations office also becomes regularly involved with our program's academics, for example in helping us logistically when we do full scale masonry laying exercises in our main gallery space as demonstration projects in our construction classes.

Community Context: The School actively seeks more opportunities to engage with the local community and other partners. We are aware that this involves coordinating with many, many stakeholders. In the past, these oftentimes have had a direct relationship to the mission of the campus or to recent curricular initiatives of the school.

By far the largest coordination effort of this sort over the past several years was the Notre Dame Truss Project, which constructed–using traditional Medieval methods–a wooden truss for potential use in the repair of the destroyed roof of the renowned Parisian Cathedral. Faculty member and Associate Dean Tonya Ohnstad led this effort. The work involved numerous groups: Handshouse Studio of Boston (for coordination, strategic planning, fundraising and logistics), The National Park Service (permitting and logistics to move massive timbers through the narrow streets of DC and permission to re-raise the truss subsequently on the National Mall), Preservation Maryland (similar logistics for deliveries through Maryland), CUA's Department of

Engineering (lectures on historical wood truss construction methods and jointing), WAAC (Virginia Tech's program in Alexandria, which sent two students), CUA's Facilities Maintenance and Operations (for campus logistics, including dorm rooms for dozens of master carpenters from across the country), and the Archdiocese of Washington DC (for Cardinal Gregory's appearance at the campus raising). Participation with the National Building Museum in DC also occurred on the project, allowing the eventual re-raising of the truss within the museum's Great Hall. The overall effort led to coverage in *National Geographic*. More information on this major initiative is available at: https://architecture.catholic.edu/about-us/notre-dame-truss/index.html and at https://www.handshouse.org/work#/notre-dame-truss/

Another, smaller example of such cooperation recently was a special studio project in our classical concentration where coordination was required with the National Gallery of Art on the downtown Mall for our students to have special access to use laser measurement devices within its galleries, allowing for the documentation of full-scale details of Pope's revered masterpiece. These mock-ups were then constructed in-house and exhibited in our main gallery. That studio was run by guest critics Timothy Smith & Jonathan Taylor from Kingston University in London.

Routinely, studio projects take students out into the city to interface with various user groups. A recent 302 studio (junior-level) proposed a redevelopment on the site of Potomac Gardens, a low-income housing project in SE Washington DC. This involved students taking extensive surveys with local residents to see how the housing could be improved when reconstructed on-site. Our 202 studio routinely uses DC sites, leading visits. Our 201 studio has used the National Gallery and the Library of Congress for sketching trips. Our Construction 2 course has involved 'case studies' of buildings in DC, typically meeting the building's architect in the field at the site.

Such projects show how we reach out beyond our campus to involve students and faculty with the expertise, institutions and residents that surround us.

The ways in which the program encourages students and faculty to learn both inside and outside the classroom through individual and collective opportunities (e.g., field trips, participation in professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities).

Program Response:

We have a rich set of programs in which students, faculty and staff are exposed to leading practitioners and experts on issues confronting architecture and cities.

The School has a long tradition of an evening lecture series, open to professionals and the community. Most prominent among them are each year's Walton Critic, who typically provides a public lecture in addition to involvement with coursework. Since the past NAAB visit, some of the major lecturers included have been Peter Pennoyer (2022), Calder Loth (2022), Trey Trahan (2021), April de Simone (2021), Carl Elefante (2021), Marshall Brown (2020), Suchi Reddy (2020), Phil Read (2020), Daniel Libeskind (2019), Paul Masi (2019), and Susan Jones (2018). Detailed information is available at: https://architecture.catholic.edu/academics/lecture-series/index.html

Guest jurists are another way this enrichment occurs. People participating over the past few years have been Robert AM Stern, David Schwarz, Alan Greenberg, Carol Rickard-Brideau, Elizabeth Plater-Zyberk, Jeff Barber, and Mark McInturff. Prominent alumni in the region are also frequent jurors, including: Robert Gurney, Brian Pilot, Gregory Hoss, Michael Marshall, Trip Hereford, and Paola Moya.

Outside the Catholic University's boundaries students have become involved with the National Civic Art Society based in Washington, DC, and particularly with the Institute for Classical

Architecture and Art (ICAA). The ICAA offers intensive enrichment courses in classical orders, classical design, history and theory of which a good number of our students have been enrolled and benefitted from numerous scholarships during the last 5 years. A recent CUA graduate was judged the superior student in his years and awarded the inaugural Ferguson Award for excellence. The ICAA also organizes in-situ drawing trips here in Washington, in New York, in Edinborough, London, Paris, and other significant locations. Students regularly attend these workshops and tours. There is a Young Professional Society associated with the ICAA open to current students, graduates and young professionals. Further, a great number of firms throughout the US have become aware of the quality of education in classical architecture here at Catholic University. Our students are in high demand and the Classical Concentration enjoys a 100% employment success rate along with a growing demand from firms. The ICAA has co-hosted events at this School of Architecture and a number of current students are benefitting from scholarships from the ICAA. Classical concentration students have also studied in summer programs in London at Buckingham University. Finally, the School of Architecture and Planning is currently developing a summer studies program in partnership with a recently-erected Classical architecture program at Cambridge University.

The School has an active set of student organizations, which includes chapters of AIAS and a re-emerging NOMAS group. The School has an active chapter of Tau Sigma Delta, the nationally recognized honor society for architecture students. These groups often participate in school activities, including programming of school-wide events. AIAS has recently, for example, opened a store within the school to provide equipment and materials to students. The national AIAS recently participated with us here on campus to present its Thinkwood' exhibit on campus. Our students also are actively encouraged to participate in the university's Research Day on campus, where hundreds of student and faculty research initiatives are presented. We are proud to say that recently one of our undergraduates, Luke Neely, received the campus-wide award for his presentation there. Most regular faculty have available to them a Research Assistant (approximately 10 hours per week); this is a prominent way in which both graduate and undergraduate students participate in the research work of the school's faculty.

Our immediate regional context is often a subject of study, taking students outside the classroom. The prominent monuments of the National Mall are in use every year; for example, our 101 introductory class uses a trip to the District's own WWI Memorial on the Mall as a subject of study for an assignment and also visits the Vietnam Veterans Memorial, the FDR Memorial, the Martin Luther King Memorial, and the fairly recent WWII Memorial on the Mall for other projects. Our 102 studio routinely uses the National Gallery and the DC Riverfront. A studio has recently visited a DC city school during a project for a new school building. Various visits to embassies within our city routinely occur, recent examples being the Norwegian, Swiss and Italian embassies. This is one of the most distinct advantages of being an architecture student in Washington DC–available nowhere else. The school has also participated with the Italian Embassy on exhibits within its space devoted to Rome programs across the country. Collaborations with the Finnish Embassy have also occurred.

Field trips beyond the Beltway routinely take place, using the East Coast megalopolis particularly as an adjunct classroom. Regarding nearby Philadelphia, for example, recent trips have included a site visit for a studio project for a proposed monastery and site for an Atheneum project. Environmental Controls 1 made a field trip to Philadelphia to visit Tim McDonald and Onion Flat's net-zero affordable housing projects in underrepresented neighborhoods. New York City is also a frequent venue for studio site visits–including a recent walking tour of classical New York City. The school also regularly arranges field trips to major works of architecture beyond our region, such as Fallingwater in Pennsylvania and Jefferson's work in Charlottesville, VA.

Summary Statement of 1 – Context and Mission

This paragraph will be included in the VTR; limit to maximum 250 words.

Program Response:

The School of Architecture and Planning at The Catholic University of America exists on a distinctive private university campus having a very particular mission of service to Nation and Church. This strongly structures what we do. Specifically, it translates into the study of the three relationships at the heart of all human habitation: our relationship with others (Social dimension), our relationship with the environment (Stewardship dimension), and our relationship with God (Sacred dimension).

Our mission also professes that we see Washington, D.C., and the larger metropolitan region, as a learning laboratory: Our mission resonates powerfully within our nation's capital. We encourage a hands-on immersion in the reality of stewardship. We embrace our city and its diverse metropolitan area through its federal governmental agencies, funding organizations, arts and museum groups, local universities, and international governments and institutions. Our decades-long presence in Rome is yet another extension of that mission, reflecting the internationalism of our city and our special relationship with the Catholic Church. Our interests in traditional architecture also reflect our physical context within one of America's greatest classical cities and our conceptual context of the Church and its millennia of architecture.

From our thriving city, and from a now thriving neighborhood within that city, we seek to instill in students the attitudes, values, skills, and knowledge to cultivate a holistic view of architecture and urban design. Our hope is that our students will assume a personal responsibility for the beauty, equity, and well-being of the world. Our ultimate goal is to forge inspiring contemporary attitudes toward Building Stewardship for society at large.

2—Shared Values of the Discipline and Profession

The program must report on how it responds to the following values, all of which affect the education and development of architects. The response to each value must also identify how the program will continue to address these values as part of its long-range planning. These values are foundational, not exhaustive.

Design: Architects design better, safer, more equitable, resilient, and sustainable built environments. Design thinking and integrated design solutions are hallmarks of architecture education, the discipline, and the profession.

Program Response:

The Program structures its broad course curriculum so as to encourage and foster students in their conscious understanding of architecture's diverse roles designing ever better built environments. The Program's course sequence is structured to build toward students' *ability*:

- To design buildings and sites that ensure their users' safety
- To design for buildings and sites that present themselves more equitably to all individuals, societies and cultures that use them;
- To design for buildings and sites such that they are able to withstand natural disasters and counteract man-made environmental impacts in the short and long-terms;
- To design for buildings and sites such that they are truly sustainable, that they: are right-sized; economical users of the cleanest possible energy sources, that they are of enduring design and construction; that their materials are not damaging either to the environments from which they come or the environment in which they are placed; and that they are adaptable to many and diverse uses during their long existence;
- To design for buildings and sites that contribute to and participate in a better, higher quality, built environment for all;
- To design for buildings and sites such that they ennoble the hearts, minds and souls of those who experience and use them.

Encouraging and fostering students in their understanding of architectural design, the Program begins early, inspiring students to think critically about the nature of architectural education, about architecture as a profession, as a discipline, and as a vocation.

The Program's courses in History, Theory, Ethics, Construction, Building Systems Integration, and Studio Design are crafted to inspire students to comprehend each of these subjects as compelling, in and of themselves and also, critically, as disciplines that together support a mature, richly complex, understanding of successful architectural Design

The Program's integrated course approach thereby inculcates a strong appreciation of integrated design solutions both implicitly and explicitly. Implicitly by means of integrating diverse courses such that together they support the works developed in our Design Studio Courses. Explicitly by means of conducting a Design Studio course dedicated to the development of Integrated Building and Site Design Solutions.

The Program continues to address and advance these Shared Design Values by broadly diverse means:

- Continually working to improve the quality and enrichment of its full-time Faculty,
- Having a Dean and full-time faculty who are highly talented and experienced designers;
- Always engaging professional practitioners as course instructors.
- A lively and challenging, compulsory architecture lecture series each semester;

- A rich variety of elective courses offered to foster critical think about architecture, its education, practice and the discipline;
- A newly adopted Design-Build course that visually and physically demonstrates to faculty and students alike the real excitement and reward of integrating the physical realities of construction and materials with architectural design;
- Semester-by-semester third-party assessment of course outcomes conducted by faculty members and by invited members of the profession;
- Annual faculty review of the Design Studio course sequence and its integration with other course sequences within the curriculum;
- Utilizing the NAAB shared values statements to test our successes on a continuing basis.

Environmental Stewardship and Professional Responsibility: Architects are responsible for the impact of their work on the natural world and on public health, safety, and welfare. As professionals and designers of the built environment, we embrace these responsibilities and act ethically to accomplish them.

Program Response:

As leaders of Christian thought and education in the Catholic community, our nation and the world, we as faculty and students owe a duty to God to preserve His creation–to preserve human dignity, the environment, and society. This fundamental value is the foundation of the environmental design sequence. It is closely aligned with 'Equity, Diversity and Inclusion' and 'Leadership, Collaboration and Community Engagement'. Together, these values promote ecologically-minded design.

We introduce ecological literacy in the first introductory course, ARPL 101 - *Introduction to Architecture* (comprising three dedicated lectures), and subsequently develop the topic in ARPL 383 - *Ethics + Stewardship*, in which we introduce scientific principles and performance-based metrics. This knowledge is integrated with a building design in the final undergraduate studio, ARPL 402 - *IBDS (Integrated Building Design Studio).*

A holistic understanding of the dynamic between built and natural environments is addressed in four courses. ARPL 383 - *Ethics + Stewardship*, introduces a theoretical discourse about built and natural environments regarding theology and actual world situations. ARPL 221 - *Predesign*, presents consistent presentations/lectures about how built and natural environments are integrated. ARPL 232 - *Environmental Design 1,* introduces metrics and procedures to calculate the performance of passive building systems and the use of material and energy resources. ARPL 331 - *Environmental Design 2,* is a more technical and thorough examination of the subject. ARPL 402 - *IBDS,* is the studio in which students integrate their knowledge with a building design, involving collaboration with external architectural firms, consulting engineers, and real clients.

We enable future architects to mitigate climate change responsibly by instilling an understanding of the following broader areas—ecology, performance, and adaptation/resilience:

- **Ecology:** In ARPL 383 - *Ethics + Stewardship*, ecological principles are exhaustively discussed in the "current issues" (Module 2), "professional ethics" (Module 3), and "scales of environmental ethics" (Module 4) — where biophilia, COVID and other critical topics are woven into architectural lifestyle choices towards sustainability to urban ecology. In ARPL - 221 *Predesign*, ecology is channeled through collaboration with professional licensed architects and engineers exposing students to business practices, firm methodologies of design processes, and environmentally-aligned programming. The next course sequence, ARPL 232 - *Enviro 1,* is where students apply, from ARPL 383 - *Ethics + Stewardship*, that knowledge of the impacts of climate change is critical to good

design. From this basis they learn about ecological principles which inform their calculations within passive strategies. Solar incident radiation, shading, water harvesting and many other passive strategies are investigated. This course's professor is co-author of an authoritative book in the field (Andrasik, *Heating, Cooling, Lighting; Sustainable Strategies Towards Net Zero Design*)—a publication based substantively upon the ecological principles developed and integrated in that specific course. This paves the path for the students in ARPL 402 - *IBDS,* to cumulatively apply ecological principles in their final studio design projects.

- **Performance:** Our environmental sequence ensures an understanding of advanced building performance principles. These are covered in ARPL 221 - *Predesign* and ARPL 232 - *Enviro 1*. These two courses tie together the theories of climate change conceptually addressed in ARPL 383 - *Ethics + Stewardship,* which are the foundation prior to technical calculations. The calculations then performed in ARPL 232 - *Enviro 1,* determine the amount of passive optimization a building may attain without the introduction of mechanical systems (including learning software such as climate consultant, etc.). ARPL 331 - *Enviro 2,* further examines how passive and active systems coexist and frames the calculations necessary to understand building loads and performance. Software (such as climate consultant, lighting analysis plug-ins, and others) are introduced along with a substantial array of hand calculations to afford students a rich education in building performance. The efforts are capped off by ARPL 402 - *IBDS,* where students are able to see the breadth of the building performance analytical tools used by external professional firms throughout an entire design process associated with the studio groups.

- **Adaptation and resilience:** ARPL 383 - *Ethics + Stewardship,* stresses current issues of global environmental concern, including professional environmental responsibilities and scales of environmental impacts. Lectures cover theoretically and practically the ideas of environmental racism mitigation, global remediation measures for climate change, and professional advances in discussing resilience and carbon reduction. ARPL 221 - *Predesign*, handles the collaboration with professional licensed architects and engineers, and exposes students to business practices, firm methodologies. ARPL 232 - *Enviro 1,* teaches resiliency and adaptation by integrating them into the foundation of passive optimization. Taught in that course are how a building is best sited, how to assess pre-developed land, and how to draw upon the various codes and assessment systems. Further support for these efforts occur adaptation and resiliency occur in an ARPL 331 - *Enviro 2,* guest lecture series, our Walton lecture series, and many of our elective courses—such as Equity in Design, LEED Lab, and Translating the New Urban Agenda into Architectural Principles. Drawing from the sequence of environmental courses, ARPL 402 - *IBDS,* is based on the fundamental principles of adaptation and resilience. It often provides project sites which are existing, require renovation, or new construction which should be resilient. In that course, the 'James Binkley Award' honors the *IBDS* team best exemplifying these environmental principles in their project. On the graduate level, our Environmental Literacy Award recognizes one thesis student who exemplifies environmental ethics, technology and creativity towards reducing global carbon emissions through design excellence, further expanding the idea of these environmental principles.

Our architectural program expands its offering of sustainable design strategies in architecture by offering a post-professional Master of Science in Net Zero Design degree. The program grounds sustainability in the university's identity and mission. Sustainability is not an end in itself, but an expression of our Catholic commitment to care for God's gift of Creation. Students are taught how to design and evaluate high-performance buildings from conception through a lifetime of use using BIM tools. The degree program recently earned the U.S. Department of Energy's Zero Energy Design Designation, recognizing the program's "commitment to imbuing students with a

greater understanding of the enduring impacts their design choices have on the built and natural environment."

Equity, Diversity, and Inclusion: Architects commit to equity and inclusion in the environments we design, the policies we adopt, the words we speak, the actions we take, and the respectful learning, teaching, and working environments we create. Architects seek fairness, diversity, and social justice in the profession and in society and support a range of pathways for students seeking access to an architecture education.

Program Response:

Expected today is that architecture schools educate and sensitize students about equity, diversity, and inclusion. This is critical to creating built environments that serve all people irrespective of their race, ethnicity, gender, religion, education, national origin, economic condition, and disability. The NAAB Shared Value of Equity, Diversity, and Inclusion (EDI) illustrates that expectation. In our program, we embrace this responsibility as a pillar of our pedagogical mission and engage it as a driver of our creative place-making. The centrality of social justice and human dignity for us provides our school with an epistemological framework that both champions and celebrates learning opportunities that emanate from our diverse student body.

The School of Architecture and Planning educates students from different faiths, races, and cultures by deepening their understanding of the diversity of people and their unique cultures, lifestyles, norms, and spatial practices, so that they can acquire the design and intellectual tools they need to spatialize fairness and inclusiveness in the built environment they shape. Our student population represents all faiths and a wide variety of local, regional, national, and international territories. That diversity contributes to our school's mission, creating a learning environment powered by cultural integration, mutual empathy, and coexistence. Our design studios and theoretical courses take into consideration and fully harness the creative potentials that the diversity of our students promises.

For us, equity, diversity, and inclusion are not just routine issues. We put considerable effort into unpacking these at times loaded and contentious words and continuously examine them as to how they could be best employed pedagogically to create people-centric, safe, beautiful, resilient, empathetic, and environment-friendly spaces. As part of this introspection, we ask: What does social equity mean? Equity is not equality. Equity is about impartiality and fairness rather than equal opportunities for all. Equity takes into consideration that not everybody needs the same level of assistance to succeed. Equity considers histories of marginalization, exclusion, and injustice that blighted some people or groups on the margin, and seeks to ensure that all people, including those who have been deprived of a fair share of opportunities before, now have access to them based on their needs and abilities. In our school, we view architectural pedagogy as both a strength and an opportunity for inspiring future architects to commit to equity as a basis for social justice and resilience in the built environment.

We understand that diversity is about difference and respecting it. A meaningful state of diversity is achieved when people of different races, faiths, gender, ethnicities, education, economic conditions, and national origins are empowered to live their lives with dignity and as they deem fit. We cultivate a learning culture that as shapers of the built environment, architects must endeavor to design safe, positive, and nurturing spaces that allow people of diverse backgrounds to not only live in an environment of mutual respect, engagement, and inclusion, but also celebrate the rich possibilities that their diversity promises. We research and understand that an environment characterized by diversity produces creativity, cultural fusion, and entrepreneurship, and that diversity is not a facile consideration, relegated to a moot interest only in different shades of people. As much as we celebrate different ethnicities, faiths, and backgrounds as a pedagogical

opportunity, we value diversity of thoughts, research orientations, working methods, and design philosophies.

Our faculty represent different approaches to architectural learning that power an intellectual cultivation of the concepts of equity, diversity, and inclusion. Julio Bermudez's emphasis on the mediation between spatiality and spirituality through a phenomenological methodology of space-making has been robustly showcased by his much-acclaimed Walton Studio that brought in design practitioners from around the world and galvanized our students from different faiths and cultures. By highlighting the simultaneous universality and specificity of different places of worship—from churches to mosques to temples—the Walton Studio examines the mysteries of the sacred and how it appeals to our spiritual and ethical imaginations. Tonya Ohnstad's pedagogy of hands-on building as a tool of community engagement has recently been demonstrated by the Notre-Dame de Paris Truss Project, a broad collaboration among the School of Architecture and Planning, Handshouse Studio, historians of Gothic architecture, and *Charpentièrs sans frontieres*. The studio constructed a full-scale model of Truss #6, one of the oldest trusses from the roof above Notre-Dame's choir, bringing together students and people of different faiths and ethnicities with the common purpose of building a piece of a medieval icon. Adnan Morshed's history and theory courses highlight the globality of the built environment, one in which local, national, regional, and global cultures shape both diverse and integrative human conditions. His recent scholarship on "urban poverty and spatial imaginations" explores how architectural narratives must include people on the social and economic fringes. Patricia Andrasik and Robin Puttock's exploration of an ethical dimension of sustainability and environmental imperatives tests the spiritual fertility of the synthesis of humans, ecology, and the common good. Mark Ferguson, James McCreary, and CJ Howard's pedagogy of Classical traditions in architecture highlights another dimension of diversity: beauty as a galvanizing force, bringing together students from different cultural backgrounds. Georgeanne Matthews' community engagement studios serve as bridge-builders between our school and immediate neighborhoods in northeast Washington, DC. Lavinia Fici Pasquina's emphasis on the digital media empowers students to explore the conditions of space-making not included in the canonical narratives of architecture.

Our school's curriculum is based on our sincere commitment to equity, diversity, and inclusion. Our novelty is that we seek to deploy these concepts not as top-down givens, but as open-ended pedagogical tools with which we can make the world a better place for all.

We have long sought a faculty of diversity. At one point since the last visit, the school had for a number of years, two African-American faculty members simultaneously (one tenured and one tenure-track), until one left to become Director of Howard's nearby program. Upon that person's leaving, we hired for three years a full-time clinical African-American faculty member (recently hired away tenure-track by another university). We have a tenured faculty member from the Indian Subcontinent. Until recently, we had a tenured faculty member from Korea (recently hired away tenured by another university). We have a tenured member of the faculty from Latin America (from Argentina), and, until recently, another tenure-track member of the faculty from that region (from Venezuela). We also have a tenured faculty member from Italy. In the most recent academic year (2021/22), the school showed an excellent gender balance of six full-time male faculty and six full-time female faculty. We also show a strong diversity of religious faiths on our faculty. In the most recent academic year (2021/22), six of the faculty self-identify as Roman Catholic, four as Protestant, one as a Muslim, and one is of unknown faith. In addition, one of the faculty also self-identifies as a Buddhist.

Our student body is also diverse, representing different faiths, ethnicities, economic backgrounds, and geographic regions in the USA and beyond. While, as a Catholic university a majority share of our students are Catholic, our students also include Protestants, Jews, Muslims, Hindus, and Buddhists. We attract students from South America, Asia, and Europe. We both celebrate and emphasize the diversity of our student body by creating a learning environment that is welcoming,

empathetic, and joyous. The chapter of the American Institute of Architecture Students (AIAS) in our school plays an important role in fostering a culture of diversity through academic events, competitions, and other festivals. Our student chapter of the National Organization of Minority Architects has been a pillar of our school's social equity and diversity initiatives.

Similarly, we have put emphasis on building staff diversity. During the past academic year (2021/22), we had two staff members from Latin America (both Brazil) and two who are African-Americans (one having recently left).

Knowledge and Innovation: Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.

Program Response:

Knowledge is central across higher education–and no less central to teaching our specific discipline. Knowledge appears in many forms. Our architecture program understands knowledge to include the declarative kinds (the 'knowing-that' related to information), the procedural kinds (the 'knowing-how' of skills, and techniques), the contextual kinds (the knowing-when or where'), and the problem-solving kinds (the intentional articulation and integration of all three knowings in order to address specific problems). We place great value in the preservation, reconsideration, and transmission of knowledge–all welcome gifts to us by past and present generations.

Innovation is also crucial. This we define as the creative consideration and development of knowledge. Yet, there is more to knowledge and innovation than just the cognitive. Given our university's and our school's distinctive mission, we assert that both knowing and innovating must go farther and address other dimensions of being: the axiological (ethical, aesthetic), the affective (emotional, attitudinal), and the spiritual (holistic or transcending, whether religious or not).

Within this epistemic framework, we engage in the production, application, and transference of knowledge and encourage the pursuit and critique of innovations through research/practice, service, and teaching.

Like many architectural programs in substantial urban areas, we are able to provide a healthy practitioner-to-academic ratio in our teaching efforts, one bringing a solid yet balanced presence of professional knowledge to the classroom. There has, however, been an important transformation since the last accreditation visit in the composition of the regular faculty. We have prioritized the hiring of a series of full-time faculty members directly from the profession (many of these from the Classical/Traditional realm, including a new dean). This obviously provides more practicing professional reinforcement to the program's teaching. But it also provides more infusion of such knowledge into our research efforts. For the first time in many decades, the program has full-time faculty showing professional projects for their research efforts toward tenure and promotion.

In addition to the change in research stream, our long-standing commitment to Modern practice and thought has been expanded to include the rich Classical tradition. The novelty of housing two powerful visions of architecture, scholarship, and the world has initiated a unique and growing dialogue among faculty and students that promises fruitful academic and professional results in knowledge and innovation.

CUA offers four graduate concentrations (classical architecture and urbanism, sacred space and cultural studies, technology and media in architecture and interiors, and urban practice). These set our school apart from others in the region and nation. These foci translate into unique ways to pursue and teach disciplinary knowledge and innovation while providing faculty the necessary

platform to explore, advance, and share their ongoing research, creative, or practice/service work. One result has been CUA becoming a leader in pedagogical and scholarly knowledge on the intersection of architecture and spirituality, sustainability, and neuroscience.

Regarding the specifics of research and scholarship, we advance disciplinary knowledge and innovation through professional practice and scholarly or scientific research. This work is widely disseminated in conferences, publications, guest lectures, interviews, exhibitions, competitions, built and theoretical award programs, and more. The relevancy of our contribution to the field has been recognized by awards or leadership positions in organizations such as the AIA, ACSA, Fulbright, ACSF, and others. A partial list includes:

- Julio Bermudez (2021 ACSA Distinguished Professor, co-founder and president of the Architecture, Culture, and Spirituality Forum);
- Adnan Morshed (Fulbright Specialist, 2021-2025)
- Mark Ferguson (founding member and past president of the Institute of Classical Architecture and Art);
- James McCrery (founding member and board member of the National Civic Art Society, presidential appointee of the US Commission of Fine Arts);
- Robin Puttock (AIA/ACSA 2021 COTE top 10 awards).

There are similar levels of recognition and service by part-time faculty such as: Carl Elefante (AIA President, Climate Heritage Network Steering Committee), Douglas Palladino (AIA-DC president), and Milton Shinberg (AIA-DC 2021 Architectural Educator Award).

CUA itself sponsors events that contribute to the disseminating of or building of new knowledge such as symposia and seminars, and widely available lecture series. A recent partial list of these includes: Fall 2018 Walton Critic Symposium, Spring 2021 Human Centric Evidence-based Design for Wellbeing Seminar, Fall 2021 The Living Presence Symposium, Spring 2023 Neurophenomenology and Architecture (forthcoming).

Despite the reduction in our tenured/tenured-track faculty and challenging budget cuts over the past 5 years, our full-time faculty has been quite productive. This includes:

- Publishing 9 books by recognized presses, 9 book chapters, 16 journal articles, 24 conference papers, and 52 articles in other venues;
- Attracting $668,000 in research funding;
- Receiving design recognitions (Ann Cederna: industrial design award; Mark Ferguson: Architectural Digest, Palm Beach Preservation Foundation, Palladio award, etc.; Christopher J. Howard: 2019 Leicester B. Holland Prize; James McCrery: 2021 Palladio Award; Robin Puttock: advisor to AIA COTE Award 2021);
- Contributing 102 buildings and 3 public art pieces to our built environment;
- Winning design awards (three in the past several years);
- Exhibiting work in nationally significant venues, such as the *National Building Museum*);
- Lecturing at 99 (regional, national and international) extramural venues;
- Participating in 101 peer reviews of various kinds;
- Organizing 6 conferences/symposia;
- And appearing in various media programs (11) and high-profile events (e.g., The Story of God with Morgan Freeman, Louis Kahn's Tiger City, TEDx talk).

In teaching we manifest knowledge and innovation throughout the curriculum. Specific indications of this would include:

- The history-theory sequence (ARPL 211/511 - *History of Architecture 1*, 212/512 - *History of Architecture 2*, 241/641 - *Theory of the Orders*, 311/611 - *History of Architecture 3*, and 314/514 - *Introduction to Architectural Theory*) – scholarly Knowledge;

- The construction courses (ARPL 333/633 - *Construction 1* and 434/634 - *Construction 2*)– technical knowledge;
- The design process and methods class (ARPL 636 - *Design Process and Methods*) – methodological knowledge;
- The Integrated Building Design Studio and Supplement (ARPL 402 and 432), the senior undergraduate and graduate concentration studios (ARPL 401, 601/701 and 603), and Thesis 1 and 2 (ARPL 696AC and 696BD) – design knowledge.

We are proud of our *Integrated Building Design Studio (IDBS)* & *Supplement* course that brings architectural offices together with our program to teach students how to comprehensively design buildings. This inherently demands knowledge-based decision making, which is grounded in research and often technical and programmatic but also includes design innovation. Further, our concentration studios and *Thesis 1 & 2* courses offer students opportunities to engage in more open-ended and exploratory types of design studies involving scholarly (social, philosophical, historical), scientific (behavioral, neuroscientific), technological (parametric, simulation, media), and axiological (ethical, aesthetic) investigations.

Non-curricular activities play an important role in advancing knowledge and innovation at the teaching level. Some involve required participation for all our students (e.g., Lecture Series and CUA Research Day) whereas others involve unique electives, presenting individuals with distinctive chances for growth (e.g., the Walton Critic Program, CUA Sponsored Symposia/Seminars, foreign studies, on-campus spiritual practices, etc.). These elective choices are supplemented by a selection of non-required classes to allow students to explore and learn more about particular or general topics related to our mandatory curricular areas (design, history-theory, environmental stewardship, structures/construction, and practice), graduate concentrations (classical, media/interiors, sacred/cultural, urban practice) and/or faculty original work. Since most of these elective classes allow 'vertical' registration (both graduate students and senior undergraduate students may take them), they collectively build on the traditional horizontal organization of the curriculum. This pedagogical strategy contributes to building a culture that fosters community and collaborative learning/teaching.

The DC metro area provides yet another remarkable resource of non-curricular learning opportunities that our school makes use of, including exhibits, lectures, programs, and events at world-class museums (e.g., the National Building Museum, the Smithsonian complex), AIA-DC, Embassies, the Library of Congress, nearby sister schools of architecture (Howard University, U of MD, and Virginia Tech WAAC), and so forth. Finally, we offer a considerable number of Research and Teaching Assistantships to our graduate students that enable them to directly participate in the faculty's ongoing research efforts, service projects, creative works, and course offerings.

Assessing these efforts involves the direct evaluation yearly by the administration of faculty performance (both part-time and full-time) and much subtler measures such as estimating attendance at lectures and events. Faculty also assess how well student research assistants are performing under their direction. The school's Board of Visitors/Advisors also assists with assessment.

Leadership, Collaboration, and Community Engagement: Architects practice design as a collaborative, inclusive, creative, and empathetic enterprise with other disciplines, the communities we serve, and the clients for whom we work.

Program Response:

Leadership, collaboration, and community engagement are fundamental to architectural practice. We strive to inspire our students to excel in these aspects of the discipline so that they may reach their greatest personal potential and fulfill the architect's value to society.

The richness of practice emerges from collaborations between an owner, architect, contractor, consultants, regulators, users, lenders, advocacy groups, and the general public who encounter the work. Collaboration is embedded in our approach to education. ARPL 221 - *Predesign*, covers the composition of a project team, the range of expertise and the contractual relationships that create the framework for collaboration. ARPL 383 - *Ethics and Stewardship* explores the architect's moral obligation to the community and the natural environment. Design studio projects are often located on urban sites which emphasizes the community's needs and expectations.

Design software encourages close collaboration. Increasingly, individual drawings are embedded in shared files, requiring close collaboration between multiple disciplines throughout the design, construction, and facility management phases of a project. This type of collaboration is encouraged in ARPL 402 - *Integrated Building Design Studio* and was accelerated during the pandemic.

Examples:

Collaboration: Detailed several times in this report is our recent truss project for Notre Dame. This experience involved a high degree of collaboration. Students were able to see how dozens of specialized disciplines participated in the fabrication of a complex piece (in scale, materials, methodologies, and erection). It also formed an example of how larger regulatory groups, such as city agencies for allowing large timbers to be moved through DC's streets, had to be consulted. Such a manifold effort could not have been undertaken and realized by architects alone. Our students learned a great deal from people who have never been in an architectural school.

ARPL 402 - *IBDS* Students work in teams of two or three and consult with local architects and consulting engineers, emulating the schematic design and design development phases of a project.

Leadership: Faculty members demonstrate leadership through research and participation in professional organizations. Leadership is discussed with students when they prepare to participate in professional venues. In the school, students participate in the election of their own leaders in AIAS, Tau Sigma Delta, and NOMAS. AIAS leaders produce events, such as a career fair, faculty art (drawings, paintings, photographs) show fundraiser, studio supply store, Dine and Design student pin-ups, the region's 'Interschool Design Competition', and presentations at our school-wide 'Town Hall' meetings.

Community Engagement: We seek projects that elevate a student's understanding of community engagement. The spring 302 studio proposed a redevelopment on the site of Potomac Gardens, a low-income housing project in SE Washington DC. The project required students to directly engage with residents and the government housing authority. At the semester's conclusion, residents attended the final presentations. In a previous 302 studio, students helped resolve a conflict between a property developer and the Brookland community through the Advisory Neighborhood Council by questioning the positions taken by both constituents and focusing on sustainability and social justice.

A fall 401 studio proposed a capitol building for the 51st state of 'Washington, Douglass Commonwealth', a new state generated by the 'Washington, D.C. Admission Act'. The US House of Representatives recently passed this legislation and it is awaiting approval from the Senate. The students selected the site for the capitol within the original 100 square mile boundaries of the District of Columbia. Site selection required investigating the character of local neighborhoods and the defining attributes of a new state.

Several faculty members participate professionally in pro bono work for parishes and other groups within the Roman Catholic community.

Lifelong Learning: Architects value educational breadth and depth, including a thorough understanding of the discipline's body of knowledge, histories and theories, and architecture's role in cultural, social, environmental, economic, and built contexts. The practice of architecture demands lifelong learning, which is a shared responsibility between academic and practice settings.

Program Response:

Lifelong learning is an essential element of any professional practice. Architecture's considerable dynamism as a profession makes this critical. Instilling this in our students lets them embark upon a career of lifelong learning. This includes: maintenance of competencies, building additional skills, and developing interests in further exploration within the field of architecture. It ensures the professional development of our students and graduates, but it also helps to assure the public that the architects they hire have true professional currency within society. Ideally, this develops into a self-motivated interest in acquiring knowledge beyond a set of imposed tasks or assigned timeframe to accomplish an assignment or a project. Such an attitude fosters professional growth through constant personal introspection and refinement of skills and knowledge, which leads to further exploration, interests, professional satisfaction, and even opportunities for employment and better placement in competitive scenarios. Further, lifelong learning enhances social inclusion by promoting an active engagement within society, including the interaction among peers and exposure to different intersecting professions.

We see evidence of this in three main categories: course work, research/service, and special/extra-curricular activities.

Course Work: Although we demonstrate our shared value of lifelong learning throughout the curriculum, our best indicators of such value can be summarized through the following course work, starting chronologically in the students' career.

- ARPL 101 - *Architectural Foundations I: Intro to Architecture*, introduces students to a broad range of architecture's current issues, seeking to expand their horizons beyond the notion of architecture being simply the construction of buildings. Actively addressed there is the dynamism of the profession and its relations to a constantly evolving set of sub-disciplines.

- Classes focused on construction, ethics, and sustainability (ARPL 383 - *Ethics and Stewardship*, ARPL333 - *Construction 1*, 434 - *Construction 2*), instill the sense of longevity, ecology, and the importance to preserve our natural environment through design, while being attentive to the choice and application of materials, construction methods, and established, as well as innovative solutions to architectural projects. The challenges posed by a changing environment are stressed, as well as the essential need for social consciousness.

- Our design studio sequence (ARPL 302, 401, 402, 501, 502, 601, 701) challenges students with a wide spectrum of diverse scales from urban to interiors. Completion of projects within Studios not only give students a sense of fulfillment within their profession, but they also ensure that their projects are relevant within current professional practice. Visiting professionals underscore the relationship between students and alumni, fostering a culture of staying connected with academia even after graduation. A particular example is the IBDS 402 Studio (Integrated Building Design Studio & Supplement course), which brings together architectural firms and students to collaborate on large-scale and complex projects to develop architectural solutions.

- APRL 401- Architectural *Design 4* & ARPL 402 - *IBDS,* are studios allowing students to develop the skills necessary to continue to learn after graduation. Throughout the semester the students are asked to do tasks that they are inexperienced in. They are challenged to determine for themselves the best course of action. This requires them to seek out information and "educate" themselves with the knowledge necessary to act. We then reveal standard approaches that are typically used in the architecture industry. They then refine their response with the benefit of this instruction. In doing so they discover the relative successfulness of their own research and learn how to refine their skills to be self-educators. Students develop the skill of knowledge discovery along with the acquisition of core information.

- Our research classes, such as ARPL 636 - *Design Process and Methods*, teach students a process for pursuing research and in-depth analysis of a variety of topics to promote self-directed exploration in preparation for their capstone work, which will be their thesis. This is followed by ARPL 696 A/C, & B/D - *Thesis I and II*, where students' self-directed projects are fundamentally and mostly inspired by current and future cultural, social, and environmental challenges, becoming often a possible future niche or even a specialization post-graduation. Not only will their thesis project serve as a prominent piece of work in their academic and professional portfolio, the methodology that they are taught throughout this research and development process, will be something that they will use for the rest of their professional careers.

- Our history classes (ARPL 211 - *History of Architecture 1*, ARPL 212 - *History of Architecture 2* , ARPL 311 - *History of Architecture 3*), encourage and promote students to reflect on architecture as a continuum between past and future, including the legacy left by prominent architects in the past and the precedents leading to the current and future acquisition/application of new theories as well as building materials and methods.

- Within the TMAIn Graduate Concentration, as well as though Undergraduate required classes (where some technology training is inserted with the intent to promote digital practices and graphical application), such as ARPL 102 - *Architectural Foundations II: Design Tools*, students are exposed to the basic technological side of design, representation, and visual communication of a project. Staying up to date with technology is critical within an ever-evolving field. Students learn that they need to stay current with newer technology, including hardware and software, to remain relevant within the profession.

- "Vertical' classes allow the registration of both graduate and undergraduate students. Different from the traditional 'horizontal' structure of the curriculum, these classes and Studios are a pedagogical approach to teach "team-" and "community-building". They also contribute to promote the culture of sharing and passing on of knowledge and foster collaborative learning/teaching opportunities among students and across years of training.

Research/Service: These efforts are ongoing. Some indicators of this include:

- A wide ranging array of exemplary faculty work shows students the essential aspect of life-long learning, setting the example and inspiring others. Our faculty has remained productive in publishing books and articles (see above). In addition, attracting significant funding to conduct scientific research receiving design awards, exhibiting work. Each of these accomplishments not only engage students within the work, but also inspire the students with examples of life-long commitment to academic growth by the faculty as a shared value.

- Alumni are frequently invited back to campus and encouraged to serve as student mentors, participating in various project crits and reviews. Many graduates directly contribute to student education in the form of giving invited seminars or serving as thesis advisors. In addition, many alumni continue to serve the community as members of our Board of Advisors, which functions to promote professional practice input into current architectural education and teaching programs within the School of Architecture.

- Internships and IPAL are fundamental to provide a good substrate to a Lifelong Learning. Several Faculty members are engaged in our IPAL Program and offer connections between our students and a variety of Architecture Firms which provide a rich selection of internships and employment opportunities. Our IPAL Program is complementary to the strict academic student education by providing an early jump into the profession and a vision into the future professional development of the young architects-in-training.

Special/Extra Curricular Activities: These efforts are ongoing. Some indicators of this include:

- CUA's geographic location within the Nation's Capital inherently promotes lifelong learning by fostering collaborative efforts with other Institutions, including the multiple professional firms within the area. In addition, access to significant places such as the National Building Museum, the National Gallery, the Smithsonian, the sequence of Embassies, the Library of Congress, the AIA and its local chapters, etc., expand the learning opportunities for students, faculty and alumni to additional exhibitions, public lectures, programs, and events beyond the walls of our School.

- CUA continues to host lectures and seminars to advance professional involvement and participation in our community and the region. Our curated Lecture Series provides the opportunity for the entire School to participate in shared professional or social learning. Continued education is ensured by annually offering Fall and Spring Semester Lecture Series as well as sponsoring Symposia and Seminars. These events provide AIA-CE credits to attending practitioners and further demonstrate our embracing this Shared Value between academy and practice.

- Research Day: For the sixth year in a row, "Research Day" provided a showcase for some of the best and most exciting research that The Catholic University of America had to offer. The 2021 event, which took place virtually on April 15, featured 78 oral presentations and 100 poster presentations from students, faculty, and staff members. Projects covered a diverse variety of subjects, including economics, education, mental health, biomedical engineering, music, and the saints.

- Job Fair: Each spring, the School of Architecture and Planning at CUA provides students and alumni with the opportunity to connect with employers, explore interests, and network with other students and alumni. Students can introduce themselves and engage with a variety of different firms that are invited to the campus, to explore post-graduate employment or potential internships. During the Fair, students also engage in discussions regarding various career paths.

3—Program and Student Criteria

These criteria seek to evaluate the outcomes of architecture programs and student work within their unique institutional, regional, national, international, and professional contexts, while encouraging innovative approaches to architecture education and professional preparation.

3.1 Program Criteria (PC)

A program must demonstrate how its curriculum, structure, and other experiences address the following criteria.

PC.1 Career Paths—How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline's skills and knowledge.

Program Response:

The goal of our curriculum in this context are two: to ensure that students are informed and well versed in the steps needed to become licensed architects, and to ensure they are equally aware of alternative career pathways pertinent to the degree. Both these impact professional preparedness. Our approach to this is comprehensive and is reiterated at various levels of the curriculum. To that end, we integrate professional readiness throughout the curriculum emphasizing three courses in particular.

ARPL 101 - *Architecture Foundations 1: Introduction to Architecture*, begins the treatment of these issues at the very initiation of a student's education. ARPL 432 - *IBDS Studio Supplement*, exposes students to the practical side of the profession, using a series of teaming exercises completed in conjunction with the integrated building design studio. Finally, ARPL 722 - *Practice Management*, exposes students to the details of contemporary professional practice, covering topics like collaboration, client interaction, project management, leadership, ethics, legal considerations and social and environmental responsibility.

Courses:

ARPL 101 - *Architecture Foundations 1: Introduction to Architecture*
This course includes:

- A dedicated guest lecture on structures as an allied discipline;
- A lecture on Ground Zero in New York City as a mega-project, which includes discussions of real estate finance, transportation nodes, city planning, 'design architects' versus 'architects of record', security, phasing, and other issues related to sub-disciplines allied with architecture in very large projects;
- Three dedicated lectures on city planning, using three capitals: DC, Tokyo, and Jerusalem; these intentionally stress different historical and modern attitudes to city formation and evolution;
- A dedicated lecture on computer visualization, which also includes discussion of careers in gaming, movies, and other related media industries; this lecture also stresses interior design as a related field;
- A portion of a lecture on landscape architecture as a career, stressing layouts of bikeways, the National Park System, and other larger system features;
- Two dedicated lectures on different scales of architectural practice: mid-size and large size firms;
- A portion of lecture on *favelas*, and related social issues in architecture and sociology;
- A lecture on Chinese cities, which stresses newly constructed multi-modal transportation systems and super-high buildings, including their structural and multi-use complications;

- A dedicated lecture on community activism in the design professions, stressing African-American urban issues.
- A dedicated lecture on sustainability, which mentions various career paths related to energy.

ARPL 432 - *Integrated Studio Supplement (ISS)*
This course is a supplement to 402/602 Integrated Building Design Studio (IBDS). This course, along with the IBDS studio, is the culmination of a curricular trajectory intended to address Regulatory Context. The intent is to provide the students with the building systems and assembly content they need to apply to their design studio work. The goals of the course are to challenge students to include conceptual and technical aspects of architectural form in the integration of the various building assemblies and systems. With the content gained in the supplement, students are able to move beyond conceptual and schematic design and consider the interaction of the various components of the building into one synthetic whole. As the supplement to the capstone studio for the undergraduate program and the threshold studio for the M. Arch students, this course seeks to help bridge the transition from the academic studio to the professional studio. The course goals include:

- Life Safety - regulatory context in addressing health, safety, and welfare of the public
- Code research – construction, type, size, height, fire systems and means of egress
- Land Use – investigation of property constraints, surveys, plats and zoning codes
- Laws and Regulations – consideration of legal content, documentation of findings in a report, and decisions regarding how best to respond to regulations

The course content is delivered through lectures, workshops and assignments. Lectures on various topics are provided by sponsoring firms, local practitioners and attendant faculty. Workshops and exercises use dedicated time with expert assistance to help better ensure retention of the lessons. Assignments facilitate learning through application to the IBDS design project. The lessons learned are reflected in a well-coordinated and complete set of architectural drawing that represent a level of “buildability”. The exhibition of the lessons learned through workshop participation in the form of discussion and engagement, and further through dedicated ISS assignments.

ARPL 722 - *Practice Management*
The course explores business management for architects. Where other courses focus on the services that architects provide to their clients (such as design), this one focuses on what architects need to know to remain in business while providing those services. It addresses effective management of architectural projects, practices and careers in terms of marketing, finance and accounting, staffing, law, organizational structure, professional development, risk management, and negotiation. In addition, it reviews the history and current state of the profession and the procedures mandated by the standard industry contracts used by owners, design professionals, and contractors in the design and construction of buildings.

Essential elements and issues of the architectural profession are stressed, specifically the core obligations formalized into the structures of licensure, legally formulated to protect the health, safety and welfare of society. Students will have met the learning objectives of this course if they have attained a level of competency appropriate for a college student in the topics listed below:

- Understanding of the many roles architects have in the built environment
- Exposure to process of examination and licensure
- Consideration of zones of responsibility and risk allocation
- Particular attention to the needs of disadvantaged people
- Importance of *pro bono publico* engagement, as an ethical and moral mandate
- Team-based, mirroring aspects of actual office practice. Roles within the teams

Assessments:

ARPL 101 - *Architecture Foundations 1: Introduction to Architecture*
Student assessment on the topics of career paths in the design fields is through the standard method of a midterm and a final examination, with multiple-choice and true/false questions.

Benchmarks
90% of students pass the course on their first attempt
75% of students achieve a B- or higher grade.

ARPL 432 - *Integrated Studio Supplement (ISS)*
Student assessment is through the review of the studio projects and the final production of a 100% DD set of Architectural Drawings. The following issues are judged:

- Understand relevant Building Code, ADA, Life-Safety and Land Use Regulations and their relevance to the current IBDS project;
- Understand MEP requirements and their relevance to the current IBDS project;
- Understand site characteristics, including urban context, historic fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.
- Understand the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an *emphasis on life-cycle cost accounting*
- Understand selection and detailing of building assemblies for the current IBDS project.

Assignments and quizzes are given in Programming; Site Analysis & Application; Zoning Code Analysis & Application; Building Code Analysis & Application; Wall Sections/Assemblies; and Cost Considerations & Application. Reviews occur at: 60% Design Development; 90% Design Development; 100% DD set; Workshop Participation.

Benchmarks
90% of students pass the course on their first attempt.
70% of students achieve a B- or higher grade.
75% of graduates 5 years past graduation have passed these NCARB tests:
- Project Management
- Programming & Analysis.
- Project Planning & Design.
- Project Development & Documentation.

ARPL 722 - *Practice Management*
Weekly readings are assigned during the theory lectures with accompanying questions. Reading and the responses to be completed prior to the subsequent lecture. Readings are derived from environmental encyclicals, theological secular resources. Student assessments are based on notes and answers to the discussion questions along with oral contributions to discussions, as well as a comprehensive final examination.
- Lectures about the content theory held in class via PowerPoint
- Student notes from the lectures submitted for grading
- Final Project as culmination of the semester's work - a written paper and graphic elements to demonstrate the students' capacity for incorporating the semester's lessons into their final semester design projects.
- Discussions held in class in 'round table' forum about the readings, from guests in various fields relating to the module. Guests are persons from the specific professions being studied.
- Comprehensive final examination

Benchmarks

- 90% of students pass the course on their first attempt.
- 70% of students achieve a B- or higher grade.
- 100% of students participate in the course's Blackboard Discussion Boards.
- 75% of graduates 5 years past graduation have passed these NCARB tests: Practice Management.

External Career Path Activities:

These are also important to this criteria. We also expose students to career paths using resources outside of the classroom. Washington, DC is a living laboratory home to approximately 500 architecture firms. CUA has access to a wealth of professional expertise, guest lecturers, visiting critics and alumni, who are all practicing architects. Moreover, the school has a high ratio of practitioner professors, so professional education is part of the curricular pedagogy. Students enrolled in the Master's program also pursue specific graduate concentrations in one of four areas -Urban Practice, Technology and Media in Architecture, Classical Architecture, and Sacred Space and Cultural Studies. These concentrations have topical studios focusing on real local projects and have direct interface with visiting professionals, clients and regulatory agencies. Each of them views the profession through a distinct lens.

Various specialty programs occur, such as our Integrated Building Design Studio (IBDS) allows students to work under the auspices of a trained licensed professional in their senior year. Our Annual Career Fair, Resume/Portfolio Workshops and Mentoring Program give students direct access to professionals who review their work, offer career advice and help prepare students to compete in the job market.

IPAL Program: The IPAL program gives students an opportunity to complete requirements for licensure while earning their degree. IPAL provides participating students with a 9-month internship concurrent with their undergraduate degree. Architectural experience credits through the AXP program allows students to take the ARE exams while completing coursework and provides an accelerated career path to licensure. The existence of this program has greatly enhanced the knowledge, generally amongst our student body of the overall licensure process.

Research Day: This annual event provides a showcase for innovative research from faculty and students at The Catholic University of America. Just this past 2022 spring semester, several of our members were nominated to present their work.

Access to D.C. architecture: Washington, DC is one of the first architecturally planned and designed American cities. The city offers innumerable opportunities to explore career paths, such as extension courses at the Building Museum, connection to the DC AIA (president is a CUA faculty member), Smithsonian Museums and the interdisciplinary consortium of six architecture schools in the DC Metropolitan Area.

Annual Career Fair: The Career Fair brings in 30-40 firms each spring and provides students with internships and mentoring opportunities. In the months leading up to the fair students participate in Portfolio, Resume and Presentation workshops.

PC.2 Design—How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

Program Response:

As set forth in the Shared Values of the Discipline and Profession - Design, we structure our course curriculum to demonstrate, foster and encourage students' design excellence. Toward that

goal, we exploit the Catholic University's and the Washington, DC region's manifest advantages. As part of the School's international programs, students are able to build upon this strong foundation farther afield.

Institutionally, as one of eleven Schools at the Catholic University of America, the School of Architecture and Planning draws inspiration and foundational principles from the ethical, moral and social doctrines of the Catholic Church. Catholic doctrine is ever ancient and ever new–the immutable truths of the human condition's relation to the original Creator/Designer being better and better understood with each generation. This provides our students with knowledge of the importance of both rootedness and curiosity in design.

Locally & Nationally, Washington, D.C., our nations' capital city, is one of the world's great *designed* cities, filled with examples of excellent architectural works representing now four separate centuries of American history. The School takes great advantage of its situation as inspiration for, and demonstration of, design excellence. Not only is Washington used as a rich source of design inspiration, it is used as a laboratory for a great proportion of the School's design efforts. Our studio courses regularly situate design assignments in Washington. Sometimes this is done within the monumental core, sometimes in the neighborhoods which are redolent with American History, and sometimes at the city's numerous special campuses–collegiate, governmental or religious.

Importantly, Washington, DC is one of a very few jurisdictions that has adopted a Green Energy Code. Later studio assignments for projects located in Washington, DC incorporate those code requirements as part of the design requirements.

Regionally, the Mid-Atlantic exemplifies world-renowned urban design, landscape design and architectural design. Nearby are resources that we exploit include: New Castle, DE; Philadelphia, PA; Baltimore, MD; Annapolis, MD; Richmond, VA; Williamsburg, VA; and Charlottesville, VA. Each of these major sources are rich repositories of significant works that range in scale, scope, type, history, and style and that serve as demonstrations, case studies, and design inspiration for students.

Further, the Richmond, VA – to New York, NY megalopolis provides students ample evidence of the region's and nation's over-reliance on automobiles and other highly-consumptive energy uses.

Finally, the region's geography provides students real-time evidence of the need for sustainable and resilient considerations in architectural design. The estuarial Chesapeake Bay, its many tributary rivers and wetlands, along with the region's hot and humid climate frequently subject to hurricanes and flooding, all serve as constant reminders to students and faculty alike of the very real need for architectural design to respond to these ever-changing conditions.

Internationally, we utilize the Catholic University's diverse *Study Abroad* programs to expose our students to a broad range of approaches to design thinking that can be found world-wide. Design projects reach beyond our nation's boundaries so as to contribute to critical architectural design challenges abroad. Projects on Pantelleria (an arid Mediterranean island), in London, and in Rome regularly present unique and otherwise undiscovered opportunities for students to expand their design thinking, to grow in their appreciation of the inherent complexities of architectural design, and to do so in unique, unfamiliar locations and settings

The best recent example of this is the design research and construction project for a new roof truss for the Nave of the Cathedral of Notre Dame de Paris, a project undertaken entirely within the School and on the University's grounds. Another area of international richness is that the Catholic University of America attracts a globally diverse student body. The happy benefit is that our program is itself an international laboratory of design thinking even before stepping outside.

Students from most continents are regularly represented in the Program, bringing their cultural understandings, histories, cosmologies, faiths and curiosities here. This has a very clear impact on design thinking in the Program among the students and Faculty alike.

Finally, the regular Faculty is composed of internationals representing the continents of Europe, Asia and South America. These are further augmented with adjunct and visiting faculty from throughout the world, most recently from the U.K.

The University's and the Region's Professional context for Design is one of the School's many great strengths. Generally, the University benefits from a large proportion of Professional Schools: Architecture & Planning, Engineering, Law, and Nursing. And there is a resultant institutional understanding of and appreciation for the critical differences and benefits that professional schools bring to a university setting. This Program is given the free reign to develop and exploit its professional nature while still benefiting from the university's Philosophical, Theological and liberal arts and letters contexts. More specifically, the Program benefits from a Dean who is a proven, successful practitioner of architecture having founded and grown a successful, large firm in New York. The Program's full-time faculty boasts a great number of licensed architects, one of whom maintains a robust professional practice and a firm of international renown here in Washington. Many of the region's firms participate in very practical ways by employing the Program's students in summer and longer-term IPAL internships. And importantly, semester-by semester, adjunct and visiting faculty are selected from among the city's and region's many great architecture and urban design firms. In these very real-world ways students are directly exposed to and immersed in the professional world of architecture even as they are engaged in their design studies. Taught design by practicing professionals, the students are steeped in the inherent complexities and challenges of architectural design.

The Design Courses – a Curricular Overview:
The concrete ways that the Program instills the role of the Design Process in shaping the built environment is by means of a multi-year sequence of Design Studios that, in turn, draw from the knowledge imparted by courses in History, Theory, Ethics, Construction, and Building Systems Integration.

The emphasis of our program in our studios is heavily focused upon the urban realm–a direct reflection of our vibrant metropolitan and regional contexts –and the challenges they bring with them- described above. There is not, for instance, a studio semester in our sequence that purposefully stresses rural or agricultural issues, though landscape does manifest in its urban forms as a matter of course. Small town issues have also not been a traditional focus of our program. We do have faculty who, in the more open format of ARPL 401 - *Architectural Design 4*, will occasionally take on those non-metropolitan issues more directly.

There are two critical capstone experiences within the multi-year studio course design sequence. They are ARPL 402 - *Integrated Building Design Studio* for undergraduates (ARPL 602 for graduates) and ARPL 702 - *Thesis Design Studio* for graduates. These are positioned consciously as the culminations of both the undergraduate and graduate programs. Each of these involves somewhat more intensive assignment and assessment methods compared to the other design studios.

These capstones studios are then further organized by another rather distinctive aspect of this School's program– the graduate-level design concentrations. Each student's concentration of design study unfolds over three semesters of graduate work. After the extremely proscriptive experience of the *Integrated Building Design Studio*, our program provides multiple opportunities for students to much more specifically explore an area of design selected from a menu of faculty expertise. These areas of study – the Concentrations- are organized by a director of each using closely-associated, mutually-enriching seminars and support courses. The vibrancy of these

offerings are one of the major marketing platforms of our graduate program, situated as we are in a region that has three or four other NAAB-accredited institutional options for students.

Undergraduate Courses:
After a series of three introductory 3-credit-hour design courses each of which includes studio components (ARPL 101- Introduction to Architecture, ARPL 102, and ARPL 201), the undergraduate student embarks on a series of 6-credit hour studios beginning with ARPL 202, where our core coverage of this *Program Criteria – Design* also commences…

ARPL 202 - *Architectural Design 1*
This studio stresses basic conceptual strategies (formality, phenomenology, order, diagram, outdoor/indoor, path-making, two-dimensional/three-dimensional, hierarchy, and so forth) in a series of hands-on assignments that engage aspects of instilling building design with abstract intentions. The major emphasis is on making. A number of abstract exercises begin the semester. The course culminates in the design of a small but complex building requiring some hierarchical design treatment. The studio uses simple programs on real locations (urban or landscape) to teach how to respond to site, program, building type, environment, and ideas through the pursuit of an all-encompassing design intention or *parti*.

ARPL 301 - *Architectural Design 2*
This studio expands the scale of the prior design effort and stresses integrating more aspects from other bands of the curriculum. The emphasis shifts from conceptual study to a greater synthesis of many complex building components. That said, abstract thinking though diagrams and *parti* development are still very much involved. The studio typically involves a lengthier design assignment for a clearly civic or cultural institution of a moderate scale, where building organization as programmatic response is key. Siting, orientation, arrival, and programmatic complexity are addressed. The sites tend to be suburban, including a need to treat plazas, greenspaces and other landscape amenities. Many outlying sites in the metropolitan region or elsewhere in the Mid-Atlantic have been used. Structure, tectonics, basic sustainable environmental design response, and some basic zoning and building code issues are introduced and are also required to be addressed. Expectations of ability in these areas are appropriately moderate, as students have not finished their technical course sequences at this stage in their studies.

ARPL 302 - *Architectural Design 3*
Following from 301 is a studio with an emphasis on multi-family, residential projects in urban settings. This is a type and context of considerable importance for our immediate region and city center, particularly given the emphasis on the many modes of bus and rail travel, including Metro, as modes of transportation. In contrast to the prior two studios, which often stress the use of hierarchically different components in architectural design, this course and its assignments emphasize the use of many identical/similar design elements. The degree and nature of housing's contribution to the evident fabric of cities is studied and developed. Dense, block-length sites are typical. The scale of the design assignment's sites often requires an element of urban design at an introductory level, usually comprising the arrangement of multiple buildings within a block to create streetscapes, inner courts, and so forth. One of the plan's several buildings will then be selected for each student's intensive architectural design study.

ARPL 401 - *Architectural Design 4*
By intention, this studio is more open-ended, allowing for instructor-led investigations. This offers students a sense that their choices are critical to their education. To a degree, this returns to ARPL 202's stress on the conceptual, but now at a much larger scale and with greater programmatic complexity and a stronger expectation of ability in design. This requires students to take project development to a greater level with emphasis on design across a range of scales including that of the region, the city, the building, the interiors and detail.

ARPL 402 - *Integrated Building Design Studio*
As described in the *Curriculum Overview* above, this studio design course is the School's fundamental, integrative design experience for students, bringing content from other bands of the curriculum into the studio.

This course is a Program Requirement for all students: all undergraduates and all graduate students enrolled from other than the Catholic University's undergraduate program. This studio explores comprehensive architectural design, design team collaboration, and team management, simulating a project design effort within an architectural practice. Typically a single, semester-length project, the size and scope of the architectural challenge are large and complex, though tightly controlled, to allow effective project completion from the Pre-Design stages through to the culmination of the project's Design Development Phase.

The most unique aspect of this studio is its obligatory student-teaming component–far beyond the norm nationally. After serious research and analysis and after students' thorough programming efforts, student teams of two (sometimes three) members are challenged to include conceptual and technical aspects of architectural form and the integration of the various building assemblies and systems to meet their project programs and the project's other technical design challenges. Each student team is expected to bring the knowledge, skills, and understanding gained from all previous coursework and experiences to the development of a conceptually coherent, comprehensive, integrated, and buildable architectural design proposal. Studio work will include schematics, integrating major building systems and sustainable strategies with design at a conceptual level shown in conceptual drawings of structural, mechanical, passive environmental and lighting systems; design development: using large scale models and drawings to test initial ideas and the integration of these ideas; studying materials and details of assembly including vertical surfaces relative to framing systems, wall sections and details of assembly; organization and composition of written, notated and drawn information within a "set" of drawings; and design presentation. Final deliverables are the project program, code analysis, with final models and drawings including site plan, foundation plans, floor plans, reflected ceiling plans, roof plans, building section, typical wall sections, and exterior elevations and interior elevations. Also required are electrical power and lighting plans, plumbing plans and riser diagrams, mechanical systems plans, and structural plans. All to the Design Development level.

Importantly, the course involves the use of respected architecture firms and engineering firms from the region that sponsor each of the course's studios so as to provide their professional, practiced expertise to the student teams.

Finally, this design course introduces to students that a successful architectural design effort involves more than just aesthetic design. Most design efforts require technical, code related, programmatic and other necessary but non-design-oriented efforts. As this is the case, this design studio is offered with a co-requisite, 3-credit-hour course that is organized and taught to be *Supplement* to this course's design effort.

This design course culminates our Program's approach of extensive professional involvement from the region in our studios across the curriculum, and forms one of the truly unique aspects of our program. After successful completion of this design studio course sequence, students are recognized with the Bachelor of Science in Architecture Degree.

Graduate Design Concentrations:
At the level of Graduate Studies, the School of Architecture & Planning arranges its program such that individual students *may* elect to focus their studies within a particular area of architectural discipline/investigation. It should be stressed here, as it is with each student, that study within an offered concentration is *optional.* Particular concentrations are: Urban Practice, Sacred Space / Cultural Studies, Classical Architecture and Urbanism, and Technology & Media in Architecture

and Interiors. Each concentration is directed by a member of the full-time faculty in areas of their individual expertise.

In offering the various concentrations to them, this Program asks students to consider and make conscious choices that reflect their interests and values. The concentration options offered are broadly diverse, but all are centered on expanding and plumbing the conceptual and formal lessons of prior studios to ever greater depths. The concentrations provide students the opportunity to go beyond simply being a passive consumer of a pre-structured course sequence, instead identifying what is important to them about their future in architectural design. Each concentration studio focuses on the design of a project or projects related to that concentration. The three design studios within any given concentration vary by theme rather than by students' educational levels. Hence these are, essentially, vertical studios. The verticality allows students with considerable experience already in the concentration to be mentors and guides for students just entering. Consistency and rigor across the semesters is ensured by the director of each concentration. Detailed information on each option is available on our website:

https://architecture.catholic.edu/academics/arch-graduate-programs/index.html

For students who elect to enter into concentrated studies, they do so following the Program's general design course curriculum while focusing the development of their architectural design abilities within their design concentration.

For students who elect not to enter into concentrated studies, they study in design studios of their choice following the Program's general design course curriculum set forth below.

In addition to the design courses described in detail below, occasional design studios are offered with an emphasis in Net-Zero Design as appropriate to our Program's parallel degree in that discipline.

Graduate Courses:
Incoming graduate students with BS-Arch degree from our Program who qualify for advanced standing typically take a two-course series (601/701) of 6-credit-hour design studios, each of which explores advanced ideas in design as related to any of the several graduate concentrations set forth above.

Incoming graduate students from other Programs or for those with non-architecture undergraduate degrees typically take a three-course series (601/603/701) of 6-credit-hour design studio courses, each of which explores advanced ideas in design as related to any of the several graduate concentrations set forth above.

ARPL 601/603/701 - *Concentration Studios I, II, III*
These three sequential courses explore advanced ideas in architectural design as related to any of the several graduate concentrations set forth above. Each builds in difficulty and complexity and challenges the students to higher levels of conceptual complexity and architectural sophistication.

ARPL 702 - *Thesis Design Studio*
The Program's view to invite students to involve themselves in the forming of their own education culminates in our two semester, research and design, Thesis studio. In this course, students undertake and complete a topic and scope of work that they propose, that was approved by the thesis faculty, and that they explored during their thesis research studies in the previous semester (ARPL 721). In both courses, ARL 721 and 702, students research their area of interest; receive input from a team of thesis instructors; consult with architects and experts in such areas as site planning/landscape; structures, materials, building assembly; and environmental systems and sustainability. The emphasis is on an individualistic synthesis that reflects the student's

developed expertise in an area of architectural design. Students' examination of the full scope of their endeavor–from site selection and context to specific building design details–is expected. By the end of Thesis Design, when presentations are given, the Program's many students witness the full range of attitudes that can be brought to architectural design, with the broad overlap demonstrated by each Thesis student's work addressing the essential spectrum of the full scale of architectural design. After successful completion of this studio and other coursework, students are recognized with the Master of Architecture Degree.

Assessments:
At the outset of each course, course instructors gather to discuss assess and establish best practices for course instruction, to establish an appropriately challenging series of course assignments and design challenges, to establish course goals that arise particular to each unique design assignment, and to acknowledge that our efforts will be assessed;

Throughout the conduct of the course each studio critic as well as each student receives ongoing assessment through public juries and pin-ups. Frequently, these juries are populated by members of the regional design community or from other regional academic, religious or governmental institutions. In many cases, visiting jurists are asked to provide written feedback, which is shared with students. Commentary and those written materials become part of the grading of the studio.

At the culminating studio Jury the course is explicitly discussed among the students and jurors for its success and for lessons learned including ways to better challenge students and teach the course in future.

Finally the entire faculty meets at the end of each semester to review selections of work (strong and weak) from every studio section and discuss instruction methods, course success and areas of needed improvement. All this focuses on whether studio goals are being met.

All of the above assessments are somewhat more intense for the two capstone studio courses. For information on specific reviews for the *Integrated Building Design Studio*, please see those course materials. Thesis 702 includes a yearly 'super-jury' of invited guest critics who review the top graduate studio design projects in the school (typically around 10 selected by the juries of each thesis studio). This panel then makes the final recommendations for thesis awards. This involves an open, concluding conversation where the panel discusses, in front of assembled students and faculty, the overall quality of the work they have reviewed.

In all the ways set forth above, the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

PC.3 Ecological Knowledge and Responsibility—How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

Program Response:

As articulated in our responses about mission and the NAAB shared value stressing environmental stewardship, our program has been a regional leader in addressing these issues. The following four courses offer evidence of our seriousness of this curricularly. Assessments in each case are integrated within their individual descriptions.

Courses:

ARPL 383 - *Ethics + Stewardship*
This course critically examines the responsibility of architects and planners as authors of the built environment. Students explore the moral imperatives of environmental design decisions in support of professional practice. Environmental ethics is framed as a symbiotic relationship between the conservancy of human dignity, the environment, and society through investigations into various scales of manmade structures from cities to buildings. There are multiple learning modalities–lecture and reading notes are graded. Modules include Terms of Environmental Ethics, Current Issues of Global Environmental Concern, Professional Environmental Responsibilities and Scales of Environmental Impacts. Lectures on theory are held in class via PowerPoint and are scheduled to introduce new topics to the course. Readings are assigned at the beginning of the week during the theory lectures, and are accompanied by questions related to them. Both the reading and the responses to the questions are required to be completed prior to the subsequent lecture. Students are responsible for all material in the readings, whether or not explicitly shown on a lecture slide. Discussions are held as a 'round table' forum. Students are required to address their reading questions with class members and any guest lecturer. Guest lecturers expand the student's perspective of the course content. Student Application Presentations (SAP's) challenge students to apply their learned knowledge to actual or simulated scenarios in the built environment and present their solutions to the class. This is where the understanding and creative application of knowledge to professional-level decisions are evaluated. The Final Project is the culmination of the semester's work. It is a written paper with graphic elements that demonstrate the students' capacity to incorporate the course lessons into their final studio design project.

ARPL 221 - *PreDesign*
The first task in designing a project is finding out what is meant by "the project". In this course, students learn to define project problems in terms of mission, value, cost, planning, urban design, ecology, program, code, and life-cycle. Further, they learn to develop and propose design guidelines related to each, and learn to communicate their findings and recommendations to project stakeholders. The learning modalities for this course include required readings specific to programming and code language. Lectures include a clear introduction to programming, zoning and building codes, site analysis, site ecology, climate risk, resilience, accessibility, life cycle assessment, urban contextual analysis. In class exercises, the students review and apply the aforementioned learned material. The content closely aligns with the content in the Environmental Design I and II courses (ARPL 232 and 331) and in the Professional Practice course (ARPL 722).

ARPL 232 - *Environmental Design I*
The course is designed to provide the necessary foundation for students to integrate environmental controls into the practice of architectural design. It provides students with the necessary skills to conceptualize and schematically design fully integrated passive building strategies for achieving thermal and visual comfort as well as energy and water conservation. Students learn to analyze climatic and site conditions for the design of massing, daylighting, solar shading, natural ventilation, thermally efficient wall sections, and water capture and retention systems. This is achieved in conjunction with learning about the ethical imperative for sustainable building design in Ethics and Stewardship (ARPL 383/783). Readings are from a single text, *Heating, Cooling, Lighting; Sustainable Strategies towards Net Zero Design (Wiley 2021),* which is co-authored by the professor of this course. Lectures introduce design strategies, analytical methods, and their application to architecture. Weekly assignments (LabPODS) require students to test various design scenarios. Examinations are held at mid-term and at the end of the semester.

ARPL 402 - *IBDS Studio*
This studio explores comprehensive design and team management, simulating architectural practice. Students are challenged to include conceptual and technical aspects of architectural form and the integration of various building assemblies and systems. Each student is expected to bring the knowledge, skills, and understanding gained from all previous coursework and experiences to the development of a conceptually coherent, comprehensive, integrative, and buildable architectural design proposal. Studio work includes schematics, using sustainable strategies, to integrate a conceptual building design with conceptual drawings of structural, mechanical, and passive environmental and lighting systems. Using large scale models and drawings at appropriate scales, the students test initial ideas, study materials and details of assembly, and the integration of systems. The final models and drawings include a site plan, floor plans, exterior elevations, building sections, wall sections, and details.

This studio accompanies the Integrated Studio Supplement (ARPL 432/632 - *ISS*) lecture course. Collaboration with professional licensed architects and engineers exposes students to professional practices and design methodologies.

Assessments:
Student evaluations are reviewed with the Associate Dean of Undergraduate Studies and the Associate Dean of Graduate Studies to guide improvements to the courses cited above. In the IBDS Studio, direct engagement of students with architectural firms and their consulting engineers, provides continuous feedback to the instructors. This is reported to the Faculty Advisory Committee which recommends improvements to the course.

PC.4 History and Theory—How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

Program Response:

The School of Architecture and Planning considers History and Theory central to its pedagogical mission. We understand and value that all architects and environmental practitioners must have a thorough understanding of history's role in the formation of current social conditions and the response of architecture to social conditions over time and across places. Applying lessons from the past to design are essential to transmitting our discipline to future generations of architects.

In the past three decades, the pedagogy of architectural history and theory has faced a host of intellectual challenges. We sought to understand some of these challenges, at least partially, through deliberation of course materials that sensitize students about the "diverse social, cultural, economic, and political forces" that shape architectural production. We showcase connectivitions between works of architecture at different scales and in different regions to add to familiar formalistic, canonical, nation-centric narratives. We have sought to emphasize the regional nature of building cultures and the migration of ideas around the globe. We have sought to overcome false dichotomies between architecture that is monumental or vernacular, traditional or modern, and western or non-western.

We champion critical thinking as a foundation for interpretation, analysis, and the production of architecture. We teach a mandatory Introduction to Architectural Theory course (ARPL 314/ 514) that critically considers contentious issues—from the search for truth to politics, including environmental planning and social justice as they are practiced across cultures, historical eras, and regions of the world.

After a basic introduction to some of these issues in ARPL 101, we teach a mandatory global survey of architectural history in three courses distributed across two academic years–[a] History-I (ARPL 211 and 511) covers the period from the agricultural revolution to Byzantine architecture;

[b] History-II (ARPL 212 and 512) spans the period from the emergence of Islamic architecture and the Romanesque to the Inca in South America, Baroque in Europe, Ming Dynasty in China, and Mughal architecture in India, and [c] History-III (ARPL 311 and 611) covers the modern era, spanning the period between the Industrial Revolution and the end of the 20th century. A two semester elective course in American History (ARPL 419) expands the course offerings.

Substantial reiteration of the course material occurs in other areas of the curriculum, particularly in The Design Process and Methods course (ARPL 636), in which extensive typological and precedent study occurs, and in Thesis I (ARPL 696A and C), in which each student independently conducts extensive typological and precedent study related to the subject of their own thesis proposal. A unique feature of our program is the Theory of the Orders course (ARPL 241). The course makes ample use of building precedents in the study of the theory, history, and application of classical architectural design principles to the analysis of historical buildings and the design of new buildings.

ARPL 101 - *Architectural Foundations 1, Introduction to Architecture*

The study of history begins in this class. Lectures focus on the architectural and cultural development of places around the globe. Three lectures are dedicated to examining the cultures and urban designs of three capital cities–Washington DC, Tokyo, and Jerusalem–and to exploring their similarities and differences. Two lectures are dedicated to examining the Villa Rotunda and the Villa Savoye and to exploring their similarities and differences. One lecture is dedicated to Chinese architecture and urbanism with an emphasis on the modern period.

ARPL 211 - *History of Architecture 1*

This course examines the history of global architecture and cities from prehistoric times to 700 CE. Starting with the environmental implications of the Agricultural Revolution and the rise of different civilizations in Mesopotamia, Egypt, India, China, South America, and Europe, the course examines the central ideas behind the Mauryan dynasty in India, Greco-Roman architecture around the Mediterranean, Qin and Han dynasties in China, emergence of Christianity and Byzantine architecture, and the rise of Islam and its architectural expression. The pedagogical method of the course is built on critical discussions of the cultural, political, religious, ecological, and economic contexts of buildings and urban areas. Particular attention will be paid to how cultural and economic exchanges between regions inform the production of the built environment. Examples will be analyzed with respect to aesthetic principles, site and urban design, spatial sequence, detailing, construction, and systems of technology.

ARPL 212 - *History of Architecture 2*

This second segment of history survey course covers the period of 600 AD to 1750 AD. One third of the lectures focus on Italy. The culture, history, and development of Italy is of great importance for the Catholic Church. Another third broadly address the remainder of Western Europe. The remaining third broadly address a wide array of global cultures. Two lectures address Islam–from its inception in Mecca to its greatest flourishing under the Ottoman Empire (and also on the Iberian Penisula). One lecture addresses Jewish architectural traditions, both in Western and Eastern Europe, and in the Middle East. One lecture addresses the Orthodox faith as it manifests in Russian and Ukraine. Several lectures focus on the Indian Subcontinent, with additional coverage of Java and Cambodia (Buddhism, Hinduism). One-half lecture is devoted to Iran (Moslem). Full lectures are devoted to China (Buddhism and Taoism) and to Japan (Buddhism and Shinto). One lecture addresses the New World, specifically the Mayan, Incan, and Aztec developments during this period. One-third of a lecture is dedicated to developments in Sub-Saharan Africa, specifically the churches of Lalibela in Ethiopia, the mud mosques of Mali, and the Great Zimbabwe complex. All the lectures deal extensively with the social, cultural, economic, and political forces at work in those areas (where known to modern scholarship).

ARPL 241 - *Theory of the Orders*

This lecture and studio format course divulges the long and far-reaching history, richness and meaning of the language of Classical Architecture and introduces foundational lessons in how it is deployed for architectural composition. The content of the course will primarily revolve around learning about the Classical Orders, and how they are used through design principles, as the essential element of classical design, along with other elements within the classical language. Beyond general knowledge and ability to speak the language, this course serves as a means to attain greater fluency through subsequent studio-design course work. The classical language inherently espouses an ethic of humanism, in being particularly responsive to the needs for human beings to have structures that intentionally accommodate human activity, convey meaning, are durable and Beautiful. In this way, the subject of this course supports the University mission to impart truth in architecture through excellence and service to humanity.

ARPL 311 - *History of Architecture 3*

The final sequence of the three-part history survey course examines a diverse range of regional and global architectural trends, aesthetic ideas, and philosophies behind them, buildings, sites, and design manifestos during the period from the Industrial Revolution to the end of the 20th century. From the rise of the industrial city in Europe and America and neoclassical architecture to the development colonial cities and cultural modernism in the form of Impressionism and Deutscher Werkbund, from the rise of the American skyscraper and the work of Frank Lloyd Wright, Le Corbusier, and Louis Kahn to the ideas of critical regionalism and New Urbanism, the course introduces students to a global range of concepts that shaped the built environment in the past three hundred years. At the heart of the course is an attempt to understand and explain the ideas of a “modern world” in all their complexities, contradictions, and ideological trappings, and how these ideas intersect with the built environment. The methodology of the course is based on a multidisciplinary inquiry into a global range of architectures and the urban, social, material, cultural, political, and economic conditions that inform and condition them.

ARPL 314 - *Introduction to Architectural Theory*

This introductory course explores the spectrum of theoretical developments over the past six decades to explain diverse practice, production, and reception of architecture across historical eras and cultural regions. It analyzes the historical, social, and cultural milieus in which these theoretical developments occur. Introduction to Theory not only seeks to probe how our perceptions of space, architecture, and aesthetics vary, but also explains the shifting notions of theory within the multidisciplinary realms of architecture, society, and culture. One of the important goals of the course will be to grasp how the discipline of architecture simultaneously informs and is informed by the diverse domains of spatial production—such as art, science, technology, economics, environment, sociology, philosophy, ecology, gender, and politics—by focusing on the ideological concerns that condition its development. By going beyond the conventional dichotomy of theory and practice, students will be urged to grasp theory not necessarily as a body of design principles, but rather as thought processes with which to produce, receive, and analyze architecture. A core pedagogical goal of the course is to encourage students to undertake research and develop skillsets warranted by it. The course assignments continuously challenge students to view research and innovation as essential parts of learning.

CUA’s mission, outlined in the *Ex Corde Ecclesiae* (meaning from the heart of the Church, an apostolic constitution issued by Pope John Paul II regarding Catholic colleges and universities in 1990), regarding the centrality of social justice and human dignity, provides the Introduction to Theory with a broader epistemological framework to examine the nature of the built environment. With its wide coverage of the spatiality, economics, and politics of human settlements, the course fits into the liberal arts curriculum or major requirements.

ARPL 636 - *Design Process and Methods*

This class investigates architectural design processes and methods through design exercises, comparative analysis, and critical discussions, both theoretically and practically. The overall premise is that every design process occurs within a general methodology that (pre)determines its ideology, universe and mode of inquiry (i.e., questions, strategies and tactics), knowledge base, representation techniques, goals, and expectations. During the first part of the semester, the focus is on understanding the fundamental nature of the design process whereas the second (and longer) part is devoted to studying a variety of architectural design methods. In addition to readings and lectures geared toward establishing a conceptual framework, the course uses short, hands-on assignments and case-studies bolstering students' understanding of history, theory, and research methodologies. A final project asks students to take a position and apply the insights collected throughout the semester.

ARPL - 696 (A, C) *Thesis 1*

Following ARPL 636 Design Process and Methods, Thesis-I is the second required course of the Graduate Thesis Program, a three-semester sequence which concludes with the completion of Thesis-II (ARPL 696D). Thesis-I provides students with an opportunity to develop a critical framework for their thesis subject as an independent assignment defined by each student and approved by the instructor, the student's external advisors, and Thesis Director. This course requires students to perform a literature review that frames a thesis question, then develop a clear methodology of data collection, analysis, and synthesis toward a cohesive research outcome. The research navigation leads to an architectural and spatial program and site selection at the end of the semester as a segue into Thesis-II Design Studio in the following semester. M. Arch/MS. NetZero joint degree students usually identify data analytics which supports their study.

Assessments:

Students assessments are comprised of tests, quizzes, and written papers. In several cases additional methods of assessment are employed, such as verbal debates in the Introduction to Architectural Theory course (ARPL 314), scored electronically by the student audience with immediate results and extensive visual presentations in the Design Process and Methods course (ARPL 636) and in Thesis I (Research) (ARPL 696 A and C). The visual presentations are typically juried in the same manner as our design studios. The Theory of the Orders course (ARPL 241) requires students to analyze existing buildings and propose new designs based on the classical orders.

PC.5 Research and Innovation—How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

Program Response:

The objective of **research** is to obtain and use relevant information to develop knowledge and understanding about a general or specific subject to respond to disciplinary problems and/or advance the state-of-the-art of architecture. Depending on its focus, architectural research could be *technically* (e.g., construction, structures, sustainability, digital), *scholarly* (e.g., theory, history, culture), *scientific* (e.g., behavioral, psychological, social, environmental), and *designerly* (e.g., integrative/synthetic, aesthetic, ethical, functional) oriented. More specifically, research is involved when doing case studies, site analysis, materials testing, programmatic development, simulations, interviewing or surveying subjects, seeking-finding-extracting-synthesizing information, developing construction details, etc. Innovation occurs when a particular investigation arrives at novel responses, techniques, findings, or insights that advance the state-of-the-art.

Since R&I (Research and Innovation) are dependent on the approach and procedures utilized, *methodological understanding* is very important and therefore addressed in the curriculum.

CUA students are expected to familiarize, deploy, and practice architectural (technical, scholarly, and designedly) research and learn how to innovate and critique its results while realizing that different ideologies or interests lead to different methodological decisions and, therefore, results. The balanced practitioner-to-academic ratio of our faculty provides our program with expertise and role models for educating students in *applied* and *scholarly* modes of pursuing research and innovation. The difference between these two modes of research has been often described as a distinction between *design as scholarship* and the *scholarship of design* respectively.

Research and innovation in the studio and classrooms are supported by a variety of resources and personnel including a large, fully equipped, and manned woodshop, multiple printers (laser, 3D, plotters) and scanners, digital and photo labs, the architectural library (in McMullen Building) and CUA library system (providing full access to the Washington Research Library Consortium– composed of 9 university libraries in Washington DC). Long term, strong, and continuous relationships with outstanding architectural firms located in the Washington DC metro area provide the school with immediate and direct access to the highest professional expertise in specific and general areas of architectural knowledge, research, and innovation.

Courses:

The following courses offer the best examples among multiple course offerings for R&I:

ARPL 241/741 and 314/514 - *Theory of Orders and Introduction to Architectural Theory* – covering scholarly R&I

This lecture and studio format course divulges the long and far-reaching history, richness and meaning of the language of Classical Architecture and introduces foundational lessons in how it is deployed for architectural composition. The content of the course primarily revolves around learning about the Classical Orders, the elements, design principles, and application of the orders to the design of buildings. This course serves as a foundation for students to attain fluency in Classical Architecture through subsequent studio design course work. The classical language embodies an ethic of humanism. It responds to the need for structures to accommodate human activity, convey meaning, be durable, and beautiful. In this way this course advances the University mission to impart truth in architecture through excellence and service to humanity.

ARPL 402 - *Integrated Building Design Studio (IDBS)* — covering technical and design R&I

The Integrated Building Design Studio course focuses on integrated architectural design and dynamic team management, simulating professional architectural practice. Students are challenged to explore conceptual and technical aspects of architectural form and the integration of appropriate building assemblies and systems. Each student is expected to draw on the knowledge, skills, and understanding gained from previous coursework and experience to develop a conceptually coherent, comprehensively integrated, and credibly buildable architectural design proposal. Studio work includes: schematic design, and the consideration of major building systems, assemblies and sustainable strategies at a conceptual level, described in diagrammatic drawings of structural, mechanical, passive environmental and lighting systems; design development, using digital models and drawings to explore, adjust and confirm the initial concepts, studying materials and details of assembly to produce drawings that are standard to the industry, including wall sections and construction details; and presentation, final models and drawings describing the design proposal in diagrams, plans, site plan, sections, elevations, and rendered perspective views. Finally, each studio section is supported by the engagement of a Partner Firm in the Washington-DC metro area, whose staff will assist in workshops and project reviews. Their contributions are essential to the studio, both as resources for helping students

better understand design integration and to expose students to a direct experience of professional practice.

ARPL 432 - *Integrated Building Design Studio Supplement* – covering technical R&I

This course supports the IBDS studio course with lessons that address the technical aspects of an architectural project. The course brings architectural firms to campus (and takes our studios to offices) in order to get students to directly work with seasoned practitioners and industry consultants and learn how to research and develop comprehensive building design solutions demanding knowledge-based decision making. The objective in this course is to achieve a sufficient level of understanding such that in the design studio the engineered systems and assemblies are integrated with an aesthetic vision to create one synthetic whole. The results are reflected in short assignments and in a complete, well-coordinated, set of architectural drawings that demonstrate “buildability”.

ARPL 636 - *Design Process and Methods* – covering methodology R&I

This class investigates architectural design processes and methods through design exercises, comparative analysis, and critical discussions, both theoretically and practically. The overall premise is that every design process occurs within a general methodology that (pre)determines its ideology, universe, and mode of inquiry (i.e., questions, strategies, and tactics), knowledge base, representation techniques, goals, and expectations. During the first part of the semester, the focus is on understanding the fundamental nature of the design process, whereas the second (and longer) part is devoted to studying a variety of architectural design methods. In addition to readings and lectures geared to establish a conceptual framework, the course uses short, hands-on assignments and case studies. A final project asks students to take a position and apply the insights collected throughout the semester using three seminal architectural texts as referential contexts.

ARPL 696 A-C - *Thesis I* – covering design R&I

Thesis I is the first required course of the Graduate Thesis Program, a two-semester sequence. Thesis I focuses on research. The course provides students with a critical, structural framework for the development of their thesis project. It requires students to perform a literature review that frames a thesis question, then to develop a clear design methodology of data collection, analysis, and synthesis into a clear statement of purpose. The research navigation should inform a program and site selection at the end of the semester as a segue into the Thesis II Design Studio in the spring.

ARPL 696 B-D - *Thesis II* – covering design R&I

Thesis II is the culmination of the Graduate Thesis Program, a two-semester sequence. The Thesis II Design Studio semester continues the architectural investigation initiated in Thesis I. Students push forward their research and analysis through the production of diagrams and multiple design exercises, culminating in a significant architectural project/proposal. Students take full responsibility for seeking direction from their professor/advocate and guest advisor, convening meetings and pin-ups. Students manage their own time in consultation with their advocate. They may bring other faculty and consultants to work with them, but the faculty of record is the professor/advocate.

Supplemental Experiences (non-curricular activities):

Our Fall and Spring Semesters Lecture Series bring nationally and internationally recognized scholars and practitioners to campus to expose students to the wide variety of ways in which architecture knowledge, research, and innovation may be deployed in service to the world.

Additionally, CUA Research Day, a university-wide event happening every year in April, makes students devote a whole day to consider the role and impact of research in society, the profession, and their lives. Also annually but in the Fall, the Walton Critic Program allows CUA students to directly witness how a world-class architect approaches, discusses, and critiques architectural ideas, problems, and solutions.

Assessments:
Success in research and innovation is evaluated in the design work coming out of IDBS and Thesis I and II every year. The high and low passing work of these classes is pinned up (or posted online) and reviewing faculty in consultation with the teaching faculty determine whether such effort constitutes 'research' (i.e., finding and developing knowledge vs. applying existing information in a proficient way) and, if so, the depth and breadth of such research and if there is novelty. In addition, the assessments and award decisions made by the design juries (confirmed by extramural professional and academic guests) reviewing the students' work become a part of the deliberative process.

Recommendations for improvements are presented by the teaching faculty to the Faculty Advisory Committee which considers them for adoption. Future course evaluations will focus on achieving the three types of research–technical, scholarship, and design–in the appropriate courses.

PC.6 Leadership and Collaboration—How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

Program Response:

Unique Institutional, Regional, National and International Contexts: Our students are dedicated to community stewardship and improving the lives of all people. Studio projects focus on enhancing the common good on sites in our own backyard. Ethics and Stewardship (ARPL 483) explores the ethical dimension of professional practice. Students study the conditions that influence design, such as land use regulation (ARPL 221 - *Pre-Design*), historic fabric (ARPL 615 - *Applied Urban Design Theory*), and real estate development (ARPL 523 - *Real Estate Development*). Projects sited in other cities call for travel, research, analysis, and engaging people in unfamiliar places.

Approaches to Leadership in Multidisciplinary Teams & Complex Problems: As students progress through the curriculum and study the allied disciplines critical to professional practice, they learn to integrate multiple design drivers into studio projects. This culminates in the Integrated Building Design Studio (ARPL 402/602 - *IBDS*). Students are challenged with complex programs, such as libraries, health and wellness centers, and other institutional projects. The students work in teams of two or three to create a set of Design Development documents. The engineering disciplines, including structural, MEP, sustainability, and site planning are significant design drivers. Student teams collaborate with professional consultants from local firms. This course challenges students to demonstrate their ability to work in teams and to lead their own multidisciplinary professional consultants. In Real Estate Development and Architecture (ARPL 625), students explore the role architects play in project conceptualization and team organization.

Innovative Approaches to Architecture Education and Professional Preparation: The IPAL program (Integrated Path to Architectural Licensure) brings students into the professional practice environment. The Master of Science in Net Zero Design advances the School's mission to Build Stewardship. The Integrated Building Design Studio (ARPL 402/602 - *IBDS*) invites students to partner with a firm, meeting on a regular basis and working together in the firm's office with the firm's consultants, who donate considerable time to critique student work as they would in actual practice. IBDS veterans have been hired by partner firms. Design Process and Methods (ARPL

636 - *Design Processes and Methods*) invites students to examine their design strategies, making "internal" processes visible and available for improvement. Students bring their studio projects into these classes for process analysis.

Diverse Stakeholder Constituents: Students learn to serve diverse constituents. In Pre-Design (ARPL 221), they develop methodologies to research and analyze stakeholder needs, especially when they do not agree. They learn that architecture is a medium for supporting diverse and sometimes conflicting needs through thoughtful design.

Dynamic Physical and Social Contexts: Washington, DC, is culturally, racially, and economically diverse. The School assigns studio projects in underserved communities to encourage empathy for these communities. Affordable Housing (ARPL 623) focuses attention on a housing type that advances the University's mission.

Supplemental Experiences: Students lead many of these programs. The elected student officers and participants in the school's chapter of the American Institute of Architecture Students sponsor events throughout the year. As students move through the curriculum and become more accomplished they are eager to exercise their mentoring muscles. *Dine and Design* is a recurring event for students to critique each other's design projects. The *AIAS Student Store* encourages their entrepreneurial and service abilities. The *Resume and Portfolio Workshops* and the *AIAS Annual Career Fair* are much anticipated annual events.

Courses:

ARPL 402/602 - *Integrated Building Design Studio*
This capstone studio requires student teams to integrate all the aspects of building design and technology they have learned to date. The students self-organize into teams of three, then report the division of responsibilities they have determined to their studio critic. Students often challenge themselves with new tasks and under-developed skills. The teams replicate the activities of a professional practice by coordinating the consulting engineers and organizing themselves to produce a multi-sheet set of Design Development documents (sometimes up to 60 sheets). The students respond to building regulations, land-use regulations, building costs, and community concerns as any professional would in a real-world project.

ARPL 722 - *Professional Practice*
This course engages students in the essential elements of professional practice, specifically the core obligation to protect the health, safety and welfare of society. Through lectures, readings and projects, field trips to a range of architect's offices students gain a detailed understanding of the pathways to professional practice, the many roles architects can serve, the architect's responsibilities, and the risks of practice. The needs of disadvantaged people are also addressed through *pro bono* engagement.

Assessments:

Courses are assessed through Teacher Evaluations (prepared by students), guest critic commentary, and peer reviews. Student performance is assessed through graded tests, quizzes, reading summaries, homework, projects, and class participation.

Benchmarks

- 90% of students pass the course on their first attempt.
- 70% of students achieve a B- or higher grade.
- 100% of students attend the School lectures.

PC.7 Learning and Teaching Culture—How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

Program Response:

Catholic University "was founded on the following core values: scholarship of the highest quality; excellence in research, teaching, learning, and service; integrity as intellectual honesty and personal moral accountability; respect for all people; freedom in the search for truth; responsibility for Catholic University's unique character, purpose, and mission; and confidence in Catholic University's identity, vision, mission, and values".

The faculty, staff, and students in the School of Architecture and Planning live these values. The school promotes a culture of community. It fosters equality, inclusiveness, and respect for each other, the profession of architecture, and the environment. Curiosity, open dialogue, and the pursuit of academic discovery occurs throughout the curriculum and is reinforced through the sense of fellowship and collaboration on campus. Numerous town hall meetings, invited guest lectures, and courses designed to promote the interaction between students, faculty, alumni, and practicing professionals, promote a sense of community and help students flourish during these critical undergraduate and graduate development years. Moreover, the consistent engagement in ongoing activities and enthusiasm displayed by the faculty and alumni, continue to contribute to the esprit de corps and optimistic outlook for the future of architecture as an enduring and growing profession.

Furthermore, in line with our school's mission of building stewardship, the school has developed a policy on studio culture, which highlights a series of key elements inherent to the schoo l(https://architecture.catholic.edu/student-experience/studio-culture/index.html). It articulates core principles of this, such as:

- The faculty, staff and students of CUA are to be engaged and active citizens within the school, the University, and their community.
- The faculty, staff and students of CUA enhance and maintain the quality of life for all members of the CUA community.
- The faculty, staff and students of CUA understand the impacts and consequences of their behaviors and actions.
- The faculty, staff and students of CUA work to uphold an ethical and professional environment for all members of the CUA community.

This policy is addressed in several town hall formats throughout the year, as well as by individual instructors in their studios.

Courses:
The following courses contain this criterion:

ARPL 101 - *Architectural Foundations I, Introduction to Architecture*
A culture of learning begins with the Introduction to Architecture (ARPL 101). It provides a broad overview of different cultures expressed through architecture. Several lectures focus on city planning and design through the example of three capital cities: Washington DC, Tokyo, and Jerusalem. The lectures stress the different historical and modern attitudes to city formation and evolution. A portion of a lecture is on *favelas* and related social issues in architecture and sociology. A lecture on Chinese cities stresses newly constructed multi-modal transportation systems and super-high buildings, including their structural and multi-use complications. A lecture on community activism in the design professions stresses African-American urban issues.

ARPL 211/511- *History of Architecture 1*
This course initiates the history sequence, stressing from the outset that our view of humankind's historic achievements must be broad and all-encompassing. The class emphasizes architecture outside the Western tradition. This is followed up in subsequent history survey courses.

ARPL 302/502 - *Architectural Design 3*
As a studio focused on urban housing, this course most directly responds to the call for creating respectful environments that encourage optimism, respect, sharing, and engagement.Oftentimes, this studio deals with underserved populations within Washington DC.

ARPL 402/602 - *Integrated Building Design Studio (IBDS)*
The team format of this studio addresses the criterion directly. Students can only succeed in this studio by forming strong, working partnerships with their peers in the course. This models what the reality is within the profession–no one gets to do architecture alone. It is a collaborative process.

ARPL 401/601 - *Architectural Design 4/Concentration Studio*
These studios are conducted and taught in a true team fashion. As a result, they are excellent examples of how the curriculum promotes collaboration, respect, and sharing, through a process that optimistically make participants engage in dialog and innovation (faculty and students). The participation of practitioners and academics throughout the semester (in lectures, crits, and reviews) further foments and exhibits a Learning/Teaching culture of that espouses these values. An excellent example can be found in reviewing the course content of the studio entitled, “Using Architecture to Respond/Address Longstanding Social, Economic, and Racial Inequities in Louisiana”, and its premise (architecture can make a difference – Phase 2 thru 4) but also the research, consultations, and collaborative design involved (Phases 1 and 3-4). See: http://juliobermudez.com/courses/bermudez-trahan/), where even the evaluation and grading includes the student’s participation, collaborative practice, and citizenship.

ARPL 636 - *Design Process & Methods*
The content of this course is also taught with an emphasis on teamwork to stimulate dialogue, share ideas, and develop innovative solutions, while always promoting mutual respect for each other and the profession of architecture. The course curriculum involves analytical, comparative, and reflective study of different design ideologies, methodologies, and processes, as well as intense research, with the participation of expert consultations/critiques, and ongoing interdisciplinary dialog. Assignments 3 and 4 in particular (See: http://juliobermudez.com/courses/636/index.htm) illustrate these examples. This course is not lecture based. It relies on active class discussion, presentation, and critique. Hence, evaluation and grading includes the student’s participation, collaborative practice, and citizenship.

ARPL 696A-C - *Thesis I* and ARPL 696B-D - *Thesis II*
Thesis I is the first required course of the Graduate Thesis Program, a two semester sequence which concludes with the completion of Thesis II (ARPL 696D). Thesis I provides students with a critical, structural framework in the development of their thesis project. The focus of this course is framing a particular question, developing a strategy for research, articulating research for incorporation through design, and developing a clear design methodology.

The Thesis II semester involves the further development of an architectural investigation initiated in Thesis I by each individual student, who will continue to push forward the research and analysis through the production of multiple design exercises, culminating in a significant architectural project/proposal. Although the faculty of record is their advocate, students are encouraged to bring other faculty and consultants to work, criticize and collaborate with them. While students work within the given structural format of the Thesis Studio, they typically present a series of diverse topics, varying the sequence of investigation and duration of reviews and presentations from individual to individual. Since the successful project is dependent on the

clear, concise communication of ideas – students are expected to develop, question and test their means, methods and medium of representation through various drawings, diagrams and models. In addition to the exposure to external jurors and critics, students often share knowledge and expertise among themselves in studio, labs and woodshop. The collaborative nature of this class exposes students to a comprehensive learning and teaching culture and environment, extending the one offered by any previous studios.

Assessments:
Issues of Teaching and Learning Culture underlie many topics of interest and concern for the students. The faculty and administration are continually working to improve communication and address concerns from students and faculty. The assessment methods within the courses are the typical teaching methodologies used.

The Studio Culture Policy is reviewed by a team of faculty and students to determine its effectiveness and pertinency, and to ensure its implementation. Its purpose is to engage members of the CUA community to respect diversity within the School and facilitate discussions between faculty, staff, students and alumni.

PC.8 Social Equity and Inclusion—How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

Program Response:

The student population at the School of Architecture and Planning represents diverse faiths, races, ethnicities, cultures, and regions of the world. An ethnicities chart for the period 2014-2021 shows that our student body is about 70% white, 15% Hispanic, 10% international, and 5% other. We view demographic diversity as a source of strength. This strength and our university's mission—outlined in the *Ex Corde Ecclesiae*, regarding the centrality of social justice and human dignity—blend to reinforce our understanding of the built environment as an empathetic shelter for all of humanity. We firmly believe that the built environment that we create must serve all people irrespective of their economic status, race, national origin, and worldviews. Through our courses and design studios we foster the students' equity and diversity literacy, an epistemological foundation with which we seek to serve the natural and built environments equitably as our moral duty rather than as an obligation. We sincerely endeavor to ensure that our students value the diversity of people and their unique cultures, lifestyles, norms, and spatial practices, so that they can acquire the design and intellectual tools they need to spatialize fairness and inclusiveness in the spaces they shape. Our students contribute to our school's rich diversity, creating a learning environment powered by cultural integration, mutual empathy, and coexistence. Our design studios and theoretical courses take into consideration and fully harness the creative potentials that the diversity of our students promise. We persistently ensure that our teachers address the following questions in all their courses and design studios. The following courses and studios demonstrate how we integrate the issues of Social Equity and Inclusion (SEI) into our pedagogy with broad interpretations of what constitutes an ethical and inclusive view of the world.

ARPL 101 - *Architectural Foundations 1, Introduction to Architecture*

This course introduces students to the world of design and architecture, its concepts, theory, language, practice, and ethics, and to allied fields (such as interior, landscape, graphic, and industrial design, to planning, construction, and development). It also introduces them to the world of the architectural student, and to the management of the demands architectural studies make of them. Students learn to raise their powers of observation and design awareness, and increase their sensitivity toward an ethical foundation of the built environment. The study of

architecture considers how people interact with the world. It shows what cultures value about the discipline of architecture. This foundation course enables the student to understand how architecture is created and how it impacts society in all kinds of ways. Students are then expected to incorporate these observations in their own creative process.

ARPL - 302/501 Architectural Design II (Studio)

This design studio course brings architectural design foundations and other university liberal arts courses together in an architectural studio setting, wherein the student can connect diverse disciplines and apply lessons learned to a design work. The attendant multidisciplinarity of the exercise encourages the student to be sensitive to the multidimensionality of the work of architecture and the needs of its inhabitants. Each student works on a moderately scaled building of a civic nature within its context of an urban realm. Architectural designs engage pre-design considerations early on, such as: program, site, regulatory codes, construction types, and relative costs impacts. The pre-design topics are covered as supplemental instruction and exercises throughout the studio and are applied directly to the design projects. Building tectonics plays an integral role in helping understand how a building is assembled and how it addresses that reality through architectural expressions. Given the civic nature of the building, it is also important to consider the artful design of the buildings' exterior character and the potential variety of spatial experiences that can provide from public to private. To do this in an authentic way, students will be asked to consider social factors necessary for the building to fit in within its context. In this sense, the "program" of the building will need to address potential needs, beyond that of the owner and users, to include a more diverse list of stakeholders in the neighborhood, city and region. This will give the students an opportunity to study the nature and meaning of a public building's role in the community, and its ability to meet both its pragmatic and civic goals and thus support the university mission to impart truth in architecture through excellence and service to others.

ARPL 311 - *History of Architecture 3*

The third segment of the history survey course examines a diverse range of regional and global architectural trends, aesthetic ideas, and philosophies behind them, buildings, sites, and design manifestos during the period from the Industrial Revolution to the end of the 20th century. The course sensitizes the students about the need to see how architecture responds to the needs of different social groups. From the rise of the industrial city in Europe and America and neoclassical architecture to the development colonial cities and cultural modernism in the form of Impressionism and Deutscher Werkbund, from the rise of the American skyscraper and the work of Frank Lloyd Wright, Le Corbusier, and Louis Kahn to the ideas of critical regionalism and New Urbanism, the course introduces students to a global range of concepts that shaped the built environment in the past three hundred years. The methodology of the course is based on a multidisciplinary inquiry into a global range of architectures and the urban, social, material, cultural, political, and economic conditions that inform and condition them. By looking at the architectures of different regions, cultures, and times students are empowered to develop an inclusive and ethical view of both history and the built environment.

ARPL 383 - Ethics and Stewardship

This course critically examines the responsibility of architects and planners as authors of the built environment. Environmental ethics is explored as a symbiotic relationship between the conservancy of human dignity, the environment, and society through investigations into various scales of manmade structures from cities to buildings.

ARPL 314 - *Introduction to Architectural Theory*

Introduction to Architectural Theory explores the spectrum of theoretical developments over the past six decades, including the challenges of architectural education needing to meet diverse societal needs, politics of historiography, architectural representation, urban transformation, ethical responsibilites of architects, and public-interest architecture. One of the important goals of the course is to grasp how the discipline of architecture simultaneously informs and is informed by the diverse domains of spatial production—such as art, science, technology, economics, environment, sociology, philosophy, ecology, gender, and politics. A core pedagogical goal of the course is to encourage students to undertake research and develop skillsets warranted by it. The course assignments continuously challenge students to view research and innovation as essential parts of an inclusive and ethically-driven learning.

ARPL 401/601 - *Architectural Design 4/Concentration Studio*

Powered by a collaborative ethos and learning, these studios are solid examples of how our pedagogical mission promotes participation, mutual respect, and inclusivity. The participation of practitioners and academics throughout the semester (in lectures, crits, and reviews) further foments and exhibits a learning and teaching culture that espouses these values. An excellent example can be found in reviewing the course content of the studio entitled, “Using Architecture to Respond/Address Longstanding Social, Economic, and Racial Inequities in Louisiana.” See: http://juliobermudez.com/courses/bermudez-trahan/), where the evaluation and grading includes student participation. At the heart of this concentration studio is the attempt to develop the idea of an ethical citizenship in the practice of architecture.

ARPL 636 - *Design Process & Methods*

This course emphasizes teamwork to stimulate dialogue, share ideas, and develop innovative solutions, while promoting mutual respect for each other and social responsibilities in the practice of architecture. The pedagogy of the course involves analytical, comparative, and reflective study of different design ideologies, methodologies, and processes, as well as intense research, with the participation of expert consultations/critiques, and ongoing interdisciplinary dialog. The course relies on active class discussion, presentation, and critique.

ARPL 696A-C - *Thesis I* and ARPL 696B-D - *Thesis II*

Thesis I provides students with a rare opportunity to spend an entire semester to independently develop a well-researched argument concerning an architectural, environmental, and social challenge that they seek to showcase through an architectural project to be further developed during Thesis II in the following semester. During Thesis I, the focus is on framing a particular question, developing a strategy for research, articulating research for incorporation through design, and developing a clear design methodology. Our students frequently take on the challenges of climate change, social inequity, environmental degradation, resource depletion, waste management, and urban decline.

More generally, to address the issues of inclusivity, diversity, and compassion, we champion diverse approaches to architectural learning that help cross-pollinate different interpretations of social equity and inclusion. Julio Bermudez’s emphasis on the mediation between spatiality and spirituality has been showcased by the Walton Studio that brought in design practitioners from around the world and galvanized our students from different faiths and cultures. Tonya Ohnstad’s emphasis on hand’s-on building as a tool of community engagement has been demonstrated by the Notre-Dame de Paris Truss Project, a collaborative studio including our students, Handshouse Studio, historians of Gothic architecture, and Carpenters Without Architects. Adnan Morshed’s history and theory courses highlight the globality of the built environment, one in which local, national, regional, and global cultures shape both diverse and integrative human conditions.

Patricia Andrasik and Robin Puttock's ethical investigation of sustainability and environmental stewardship tests the spiritual fertility of the synthesis of humans, ecology, and the common good. Mark Ferguson, James McCreary, and Christopher J Howard's pedagogy of Classical traditions in architecture highlights another dimension of diversity: beauty as a galvanizing force, bringing together students from different cultural backgrounds.

3.2 Student Criteria (SC): Student Learning Objectives and Outcomes

A program must demonstrate how it addresses the following criteria through program curricula and other experiences, with an emphasis on the articulation of learning objectives and assessment.

SC.1 Health, Safety and Welfare in the Built Environment—How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

Program Response:

Awareness and Prioritization of teaching Health Safety and Welfare (HSW): In addition to preparing our students for their professional responsibility as required by state licensure, our program aligns itself with the mission of the University at large, which gives its highest priority to the preservation and enhancement of society as an ethical obligation and a moral duty. Through this lens, "welfare" is seen in the broadest terms, not as a minimum standard but as an aspirational objective for helping humanity thrive.

As a Catholic university, we are guided by the Church and, with the stewardship of our planet in mind. 'Laudo Si', Pope Francis's Encyclical on climate change, directs our attention to survival and equity. From the Encyclical: "Humanity still has the ability to work together in building our common home . . . Truly, much can be done!" "Education in environmental responsibility can encourage ways of acting which directly and significantly affect the world around us." "Young people demand change. They wonder how anyone can claim to be building a better future without thinking of the environmental crisis and the sufferings of the excluded."

Strategy for teaching HSW: Our courses and design studios manifest sustainability, resilience, life safety and societal welfare into course content and project requirements, regardless of building type. Project selection in studios often address the particular needs and aspirations of underserved communities. This carries forward to the thesis project selections that our graduate students make for themselves.

This translates directly into the mission of the School of Architecture, to prepare students for their future responsibilities in the architectural profession both as principled experts in the making of healthy and safe environments and as advocates for society's potential to improve the quality of life. Through our curriculum and our extra-curricular programs, we inculcate our students in the linkages between these values and their manifestations in architecture and its practice.

At the building scale, our technical and professional course sequences address issues of:

- Structural integrity and building-force management (Structures 1, Structures 2 and Advanced structures);
- Fire safety, safe entry/egress, and universal design (Environmental Design 2 and Pre-Design); and
- Healthy and comfortable sensory environments (Environmental Design 1 and 2)

Our interpretation of HSW extends beyond the occupants of an individual building. We also offer opportunities for our students to examine the role of the building in:

- Healthy ecosystems (Ethics & Stewardship, Environmental Design 1 & 2)
- Healthy urban spaces and streetscapes (Pre-Design)
- Thriving and equitable communities (Ethics & Stewardship, Professional Practice)
- The physical health of building occupants as set forth by WELL and LEED, which are integrated into technical courses and studio work.

The primary goal of the Construction and Structures classes is to understand architecture as constructed space through the study of site conditions, building codes, structural strategies, construction materials, and construction assemblies.

Our environmental, structural and construction courses are couched in CUA's mission and promote thoughtful making. Thinking and making are symbiotically joined. Students learn how structures work by conceptualizing solutions to problems, testing models, observing failures and refining their solutions. Students learn about tectonics through in-class demonstrations and assignments and in our Design/Build elective course.

Courses:

ARPL 221 - *Pre-Design*
Pre-design covers the requisite analysis and investigation an architect undertakes before commencing with design work. In addition to basic programming, including area requirements for common space types, adjacencies, students learn how to summarize the regulatory regimes, including zoning and building codes, as they are applied to design studio projects and ultimately to professional practice. Owner and stakeholder needs are viewed broadly to create design agendas that emphasize health and welfare as prime directives in our profession.

The course spends several weeks studying how to analyze a project's site from a variety of perspectives: ecology and climate risk; evaluating existing built structures for viable reuse; safety and health risks associated with existing elements that may be considered biohazards; understanding existing infrastructure and utilities; and evaluating the population the project will serve. The course dives deep into health and safety with introductions to both zoning and building codes and how the requirements of each have evolved over the years to be both limitations and opportunities for enhancing occupant wellbeing. Students study zoning codes to know the allowable buildable envelope on a site and to understand the rationale behind regulations that contribute to a positive occupant and pedestrian experience. When studying building codes, the course covers construction types, fire ratings, occupancy classifications and calculations, and egress sizing.

Class time is also spent covering equity in the vein of universal design and understanding why architects have a responsibility to create fair and accessible spaces. The course covers the Americans with Disabilities Act in depth, and the relationship of ADA to design guidelines such as ANSI 117.1. The course touches on the Fair Housing Act, and how both FHA and ADA were developed as federal law.

ARPL232/532 - *Environmental Design 1*
The goal of this course is to learn the principles of passive design strategies for achieving thermal and visual comfort as well as energy and water conservation. Students learn to analyze climatic and site conditions and methods for applying this information to the development of massing, daylighting, solar shading, natural ventilation, thermally efficient wall sections, and water capture and retention systems. This is done in conjunction with an understanding of the ethical imperatives for sustainable design taught in Ethics and Stewardship (ARPL 383/783).

ARPL 331/731 - *Environmental Design 2*
This course provides students with a full understanding of the relationship between architectural design and active building systems. The topics include: building loads calculations, heating and

cooling systems, lighting design, electrical systems, acoustical systems, building water supply, plumbing systems, and fire protection. The course ties numeric analysis to holistic design principles and ethical concerns taught in Environmental Design I (ARPL 232/532) and Ethics and Stewardship (ARPL 383/783). The course provides students with the fundamental skills to conceptualize and schematically design fully integrated building systems in accordance with current code provisions.

ARPL 383/783 - *Ethics & Stewardship*
This course critically examines the responsibility of architects and engineers as authors of the built environment. Environmental ethics is explored as a symbiotic relationship between the conservancy of human dignity, the environment, and society through investigations into various scales of manmade structures from cities to buildings. This course is co-taught by faculty from the Schools of Theology and Engineering and Architecture. Students become familiar with the terms, concepts and foundation of environmental ethics, faith-based stewardship and social justice as a doctrine of sustainability in order to investigate global environmental issues, professional responsibilities as architects, and ethical implementation into various scales of built environmental design.

ARPL 441/541 - *Structures 1*
Three courses contribute to students' core understanding of structures in architecture and the architectural profession's role in achieving safe built environments. The first course emphasizes statics and basic principles of structural behavior, using conceptual and mathematical approaches to help students acquire foundational knowledge of structural principles. Structures 1 begins the pupil's path to understanding the theory and process of structural engineering. Before a practical understanding of safety factors, material applicability, loading conditions, or structural stability can be broached, an understanding of the language and thought processes of structural engineering must be created. Once the theory of structural systems is understood generally, the broader understanding of structural integrity is discussed in later courses. Concepts learned in this course are applicable to single structural members as well as complete building structural systems. Structures 1 begins with fundamental understanding of vectors, forces, moments, shears, loads, stress/strain, and structural system analysis. Theory continues through basic beam and column design. Structural theory is presented through lectures, models, and text books. Ultimately, each student will be able to identify structural items, estimate their loading conditions, analyze the stresses involved, and select appropriate members sizes for the elements. Student proficiency is measured through homework problem solving and exams.

ARPL 402/602 - *Integrated Building Design Studio*
This capstone studio allows student teams to integrate all the aspects of building design and technology acquired to that point in their studies in a project with a full array of program, site, sustainability, building and land-use regulations, building costs, and community concerns that would be present in a professional project. The studio is set up to create a model of office practice, coordinating as an architectural team, working with consultants, creating drawing deliverable sets at the Schematic and 50% Design Development level. IBDS is supported by a closely coordinated parallel course, the Integrated Studio Supplement (ISS) that brings special attention to project issues as they occur in their projects' development. This includes: Structures, HVAC, Building Code, Cost, Urban and Sustainability issues. Many lectures are delivered by invited speakers from the local professional architectural and engineering community.

ARPL 432/632 - *Integrated Studio Supplement*
This course is a supplement to the Integrated Building Design Studio (ARPL 402/602). This course supports to the studio course by directly addressing technical aspects of an architectural project

ARPL 442/542 - *Structures 2*

This course examines the primary structural systems (wood, mass timber, steel, concrete) and evaluates them using the principles developed in Structures 1.

ARPL 722 - *Professional Practice*
This course engages students in the essential elements and issues of the architectural profession, specifically the core obligations formalized in the strictures of licensure, legally formulated to protect the health, safety and welfare of society. Through lectures, readings and projects, students gain a detailed understanding of the paths to practice, the many roles architects have in the built environment, the process of examination and licensure, zones of responsibility and risk allocation. Particular attention to the needs of disadvantaged people, in part addressed through pro bono publico engagement, is an ethical and moral mandate inculcated through this course.

ARPL 742 - *Advanced Structures*
This course applies the lessons and knowledge of the previous structures courses to conceptual and calculated structural problem solving along with investigation of less conventional structural strategies.

Supplemental Experiences
The School enriches the curricular objectives and activities through engagement outside the classroom. These activities instill and promote the values and understanding of Health, Safety and Welfare:

- Guest Lectures: The lecture series of each semester emphasizes a wide range of aspects of architecture. HSW often figures prominently, particularly in addressing the welfare of our society.

SC.2 Professional Practice—How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

Program Response:

At the earliest onset, our freshmen in ARPL 101 - *Introduction to Architecture* are provided with the awareness of professional responsibility. Namely via two lectures about the functioning of small and large architectural practices, reflecting on how offices should manage the design process based on the firm size with respect to the capacity of design projects and business operations. The ethics of professional practice are officially introduced in ARPL 383 - *Ethics + Stewardship* in the students' following semester as they become second-year students. One three-week module specifically focuses on professional ethics and constitutes readings, discussions and a final scenario Student Application Presentation (SAP) which simulates an actual practice-based scenario which students must solve based on their cumulative knowledge of AIA Code of Ethics and Professional Conduct, and other similar documents introduced in the course. In fact, every lesson in this course is updated to include current issues; COVID, environmental racism, and topics which are important to our profession and which dually serve to be change forces on professional practice. While students may be early in their careers, regulatory requirements are also introduced in this course and revisited in the sequence of other technical courses and studios throughout their education.

After this initial introduction, professional ethics, regulations/codes and business processes and the forces which impact these factors are intermittently engaged in various studios by a consistent exposure to local architectural firms in the DC area. Embarking on our location near over 500 firms, juries, guest lecturers, regular and revolving visiting critics and external

consultants compose the professional cadre who have the experience to lead conversations about professional practice during studio time relative to their own work. These interactions are piqued in their final studio.

The fourth-year studio, ARPL 402 - *IBDS* and its complement ARPL 432 - *Integrated Studio Supplement*, offer students an opportunity to fine-tune their exposure to these professionals as they work side-by side with a dedicated firm to complete a project from Schematic Design to Construction Document phases. Decisions between team members, consultants, 'clients', and other parties put professional liability and ethics into close proximity with actual experiences of ethical integration, regulatory requirements and business processes in the country. Specific codes explored throughout design are incorporated. The collaboration with professional licensed architects and engineers expose students to business practices, firm methodologies of design processes, and such. ARPL 432 - *ISS* in particular exposes students to lectures by code officials. Lectures by licensed professionals present their knowledge to students who simulate practice through this type of collaborative and integrative studio.

Our capstone course ARPL 722 - *Professional Practice* dedicates two full lectures and one assignment to ethics specifically but also navigates the entire spectrum of what is desired by NAAB in this topic regarding (a) regulatory requirements specifically addressed in the 'contracts and agreements' lecture and assignment, (b) and business processes which are specifically addressed in several lectures and assignments throughout the semester. Global forces which shape professional ethics, regulatory requirements and business processes are also discussed since students are expected to have a good foundation to these mutating factors of our profession. External practitioners are introduced to students in this course to discuss advances which control business practice such as BIM, and the information age. Current events that impact the practice are introduced among a finale of professionals via a final panel discussion where students can truly engage with what is occuring in our practice.

Courses:

ARPL 221 - *Pre-design*
Pre-design asks students to consider the many facets of a project prior to the commencement of structural or site design. The due diligence covered in this course reinforces the licensure requirements of upholding health, safety, and welfare of clients and the general public. The course covers existing conditions analyses as well as regulatory requirements to a project's site, program, and use. Lectures,in-class assignments, and individual homework assignments focus on reading and interpreting applicable zoning and building codes as well as the application of key federal legislation that impacts design (such as the Americans with Disabilities Act and the Fair Housing Act). In addition, how to approach a project and organize project management is discussed through the lens of assembling a team of design consultants appropriate to a project's scope of work and the contractual bonds an architect may have with such consultants. Project scheduling and early-phase cost estimating is also covered to round out the practice management aspects of pre-design. Throughout the course business writing skills are honed through homework assignments and using various means of communication to potential clients.

ARPL 383 - *Ethics+ Stewardship*
This course critically examines the responsibility of architects and planners as authors of the built environment. Students explore their moral imperatives of environmental decisions which support professional guidelines. Environmental ethics is framed as a symbiotic relationship between the conservancy of human dignity, the environment, and society through investigations into various scales of manmade structures from cities to buildings. There are many learning modalities, since even lecture and reading notes are graded. Modules include Terms of Environmental Ethics, Current Issues of Global Environmental Concern, Professional Environmental Responsibilities and Scales of Environmental Impacts. Lectures about content theory are held in class via PowerPoint and are scheduled to introduce new topics to the course. Readings are assigned at

the beginning of the week during the theory lectures, and are accompanied by questions related to them. Both the reading and the responses to the questions shall be completed prior to the subsequent lecture. Students are responsible for all material in the readings, whether or not explicitly shown on a lecture slide. Discussions are held as a 'round table' forum. Students are required to address their reading questions among the class members and any guest lecturer. Student Application Presentations (SAP's) are assignments which challenge students to apply their learned knowledge from readings and discussions to actual or simulated scenarios in the built environment. SAP's are opportunities for students to describe their application solutions to the class. This is where professional decisions are evaluated by the underpinnings of creativity through integration of the reading materials. The Final Project is the culmination of the semester's work. It comprises a written paper and graphic elements to demonstrate the students' capacity for incorporating the semester's lessons into their final semester design projects. Student evaluations discussed between the Associate Dean of UG/Grad and the professor gauge continuous improvement and tracking of this course.

ARPL 402 - *IBDS Studio* + ARPL 432 - *Integrated Studio Supplement*
This studio explores comprehensive design and team management, simulating architectural practice. Students are challenged to include conceptual and technical aspects of architectural form and the integration of the various building assemblies and systems. Each student is expected to bring the knowledge, skills, and understanding gained from all previous coursework and experiences to the development of a conceptually coherent, comprehensive, integrative, and buildable architectural design proposal. Studio work will include schematics, integrating major building systems and sustainable strategies with design at a conceptual level shown in conceptual drawings of structural, mechanical, passive environmental and lighting systems; design development: using large scale models and drawings to test initial ideas and the integration of these ideas; studying materials and details of assembly including vertical surfaces relative to framing systems, wall sections and details of assembly; and presentation: with final models and drawings of site plan, plans, sections, and elevations. The supplement to 402/602 *IBDS* provides the students with the building systems and assembly content they need to apply to their design studio work. The goals of the course are to challenge students to include conceptual and technical aspects of architectural form in the integration of the various building assemblies and systems. With the content gained in the ISS supplement, students are able to move beyond conceptual and schematic design and consider the interaction of the various components of the building into one synthetic whole. As the supplement to the capstone studio for the undergraduate program and the threshold studio for the M. Arch students, this course seeks to help bridge the transition from the academic studio to the professional studio. Modes of learning include readings for reference only. This studio accompanies the lectures of ISS. While not formal lectures, the collaboration with professional licensed architects and engineers exposes students to business practices, firm methodologies of design processes, etc.

The unique studio environment where students directly engage with architectural firms has several methods to ensure continuous improvement. (1) A post-Semester meeting of all IBDS faculty with associate deans. (2) Post-semester student evaluation specifically for this studio and supplement ISS. (3) Faculty are assigned to the final course presentations for evaluation if it follows the stated syllabus. Challenges, successes addressed and corrected the following year.

ARPL 722 - *Professional Practice*
The course explores business management for architects. Where other courses focus on the services that architects provide to their clients (such as design), this one focuses on what architects need to know to remain in business while providing those services. It addresses effective management of architectural projects, practices and careers in terms of marketing, finance and accounting, staffing, law, organizational structure, professional development, risk management, and negotiation. In addition, it reviews the history and current state of the profession and the procedures mandated by the standard industry contracts used by owners, design professionals, and contractors in the design and construction of buildings. Modes of

learning include one critical reading source, and secondary recommended. Panel discussions and external speakers are also frequently employed as well as assignments. This course is assessed through a post-semester meeting with the Associate Dean for Graduate students.

SC.3 Regulatory Context—How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

Program Response:

Our students achieve an understanding of life safety and land use codes in courses dedicated to these subjects and apply their understanding throughout the design studio sequence.

The courses that best exemplify this effort are: ARPL 221/521 - *Predesign*; ARPL 331 - *Environmental Design 2;* ARPL 402 - *Integrated Building Design Studio*; and ARPL 432 - *Integrated Studio Supplement.*

ARPL 221/521 - *Predesign*
The first task in designing a project is finding out what is meant by "the project". In this course, students learn to define project problems in terms of mission, value, cost, planning, urban design, ecology, program, code, and life cycle. They learn to develop design guidelines related to each issue and they practice communicating their findings and recommendations to project stakeholders.

- **Life Safety:** Pre-design introduces the regulatory context as a means by which architects ensure the health, safety, and welfare of the public. While not yet designing a structure, students are introduced to model building codes and the logic behind them. The concepts of fire ratings, means of egress, and the components of an egress system are introduced, particularly how the internal building components relate to site planning and exiting from a building to the outdoors.

- **Land Use:** The course goes into depth regarding land use, including municipal regulation, the definition of property, types of ownership, and methods by which property can change hands, and the various financing options available for such a transaction to take place. Lecture time is spent defining a property's edges through metes and bounds as well as how local municipalities may define land through zoning codes. This is followed by an in depth explanation of zoning codes from their beginnings to the pros and cons of modern zoning. Students gain hands-on experience working with the local zoning ordinance (DC), understanding the limits and opportunities the code provides. The course covers the means by which zoning codes can change and how architects may approach challenges posed by specific districts (such as the differences between variances, special exceptions, amendments, etc.). Additional lecture time is spent discussing parking and how that fits into site usage.

- **Laws and Regulations:** This course covers zoning codes, building codes, and federal laws that include design guidelines such as the Americans with Disabilities Act and the Fair Housing Act. Major differences between zoning and building codes are discussed, including the cadence by which documents are updated, who enforces them locally, and how they can evolve over time. Students are encouraged to explore the reference codes and standards through in-class exercises and home assignments.

Assessments:
Through in-class examples and homework assignments, students are asked to evaluate a series of theoretical proposed projects and make recommendations to the client regarding the analysis

of various code requirements. These assignments require the students to understand the programmatic elements that relate to regulatory requirements, research in the code documents the applicable elements that may shape the project as it moves into design, and identify potential issues where a project may not comply with specific tenets. In the case of the zoning analysis, students are asked to evaluate three sites for one project and recommend one site to move forward. In the assignment covering building codes, two sites are proposed with basic zoning code analysis completed. Students are asked to recommend the more appropriate site, size the occupant load and egress requirements, and note why they are making the specific recommendation to the client. The final synthesis project builds upon these and other topics covered in the semester, asking students to evaluate a project site and client's requirements with relation to programmatic analysis, existing site context, and cost in addition to zoning and building code analysis.

Benchmarks
86% of students pass the course on their first attempt.
67% of students achieve a B- or higher grade.

ARPL 232 - *Environmental Design 1*
The goal of this course is to learn the principles of passive design strategies for achieving thermal and visual comfort as well as energy and water conservation. Methods of analysis and the application of their results to building designs are studied.

Life Safety is addressed in the exploration of building passive strategies and regulatory requirements. Land use is explored as a complement to building systems, in understanding how building siting can influence passive solutions that drive down energy use before mechanized systems are introduced. Building code requirements for: energy use, as well as general occupant wellbeing are covered as they relate to the design of building passive strategies within the full project context of a building design. This includes comparing baseline requirements from model codes with more specific energy conservation codes, with an intent to exceed those minimum requirements.

Benchmarks
90% of students pass the course on their first attempt.
70% of students achieve a B- or higher grade.

ARPL 331 - *Environmental Design 2*
The goal of the course is to provide students with the necessary skills to conceptualize and schematically design fully integrated building systems in accordance with current sustainable code provisions and after passive systems have been introduced.

Life Safety is addressed in the exploration of building systems and regulatory requirements. In addition, students understand the "why" behind requirements related to life safety and how building systems have evolved to meet those criteria. Land use is framed within the context of building siting which can influence passive solutions (via Enviro 1) that drive down energy use before mechanized systems are introduced. Building code requirements for indoor environmental quality, energy use, as well as general occupant wellbeing are covered as they relate to the design of building systems and the integration of the systems into full project design. This includes comparing baseline requirements from model codes with more specific energy conservation codes, as well as pushing buildings to perform better than code minimum requirements. Differences between green building standards and green codes are also discussed early in this course.

Bechmarks
90% of students pass the course on their first attempt.
70% of students achieve a B- or higher grade.

ARPL 402 - *Integrated Building Design Studio*
IBDS is the required capstone studio for undergraduate and graduate studios, building on all previous studios and integrating prior courses that address the full range of HSW elements, from regulatory requirements, sustainable systems, to structures and MEP. The regulatory context is a critical element in authentically realizing a successfully integrated building because it acknowledges and responds to the first order of business, making our building healthy, safe and responsive to our welfare. This course, together with the supplement course of ARPL 432 - *ISS*, provides a laboratory for students to demonstrate these critical responses. This course is directed by a senior, tenured faculty member who is a licensed architect and who also teaches one of the studio sections. All studio sections are taught by practicing, licensed architects selected from among the adjunct faculty and especially from among successful practitioners and leaders in the Washington, DC region. Each studio section is, in turn, sponsored by an established Architecture firm in the Washington, DC region. Each student is thus guided by instructors that know and practice well the various facets of regulatory context. All instructors, sections and students of this course convene within the context of the ISS course to address regulatory context. In ISS, lectures and workshops are delivered to the students/groups as a means of introducing them to the subject & proactively working through the material to achieve a level of familiarity and competency. This is in a sense, preparation ground that then gets translated and applied within the studio context.

- **Life Safety:** In the studio context, students apply to their designs, life safety lessons learned from the ISS course such as: the proper selection of a construction type as seen in a wall section, determining permitted sizes and heights of the building, providing and showing means of egress in plan diagrams and including fire-suppression systems in electrical plans. Sponsor firms then contribute by offering professional feedback through invited code experts and/or internal specialists on life safety.

- **Land Use:** The design format of this course intends to simulate an actual professional project. As such, it has a “owner” that is necessarily related to the owned land. Given this, and a particular site with a particular building type, the students are able to immediately focus on all of the particular limiting factors of the land the building is to occupy. Once the constraints are understood as well as the owners wishes, the students make decisions that impact the form and location of their design and the broader usage of the land. Sponsor firms would also participate in these site analysis and design considerations.

- **Laws and Regulations:** The integrated nature of this course is holistic in understanding that not only the systems of the building need to be coordinated and integrated but the regulating factors as well. The rigor and seriousness of this course warrants a commitment to all attendant laws and regulations. This can include critical thought about existing laws and regulations, but remains a “By-right” exercise in how to sensitively and respectfully accommodate building regulation for the expressed purpose of making a the built environment healthy, safe and sensitive to human wellfare.

Successful completion of this course will enable students with the ability to:

- Prepare a comprehensive program for an architectural project that includes: an assessment of client and user *and stakeholder* 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.
- 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.

- Design sites, facilities, and systems that are responsive to relevant codes and regulations and include the principles of life-safety (emphasis of egress) and accessibility standards.
- Understand the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.
- Produce an architecture project that integrates the following systems: structural, environmental, life safety, building envelope, building assemblies and building service, into building design as described by the National Architectural Accrediting Board (NAAB) Performance Criteria.
- Produce a set of comprehensive professional drawings that reflect the level of content found at the Design Development phase of a project.

Assessments:
This course takes advantage of a laboratory like framework in tandem with ISS. While the ISS delivers preparatory lessons associated with the design project, the IBDS studio instructor engages in conventional design studio Desk Critiques on a regular basis. On a less regular basis, sponsoring firms host their studio sections' students at their firm offices throughout the course to expose students to the professional and practical conduct, progress and collaboration processes of Integrated Building Design. Evaluation is then ultimately achieved through the review of the studio projects and their final product of a set of Architectural Documents approximating a 100% DD set of drawings.

Assignments:
- 60% Design Development Set – Firm Presentation
- 90% Design Development Set – Firm Presentation
- 100% DD Set – Final Presentation

Benchmarks
90% of students pass the course on their first attempt.
70% of students achieve a B- or higher grade.
100% of students participate in the course's Blackboard Discussion Boards.

ARPL 432 - *Integrated Studio Supplement*
This course, along with the IBDS studio, is the culmination of a curricular trajectory intended to address Regulatory Context. The goal of this course is to provide additional support to the IBDS studio, by directly addressing particularly technical aspects of an architectural project, such as: site analysis, programming, code research (both building and zoning), cost-assessment, building assemblies and systems integration (Mechanical, Electrical, Plumbing & Structural). The objective is to achieve a level of ability and understanding of these aspects, such that they can then be incorporated/integrated within the aesthetic vision of a studio design project to become one synthetic whole. The course content is delivered through lectures, workshops and assignments. Lectures on various topics are provided by sponsoring firms, local practitioners and attendant faculty. Workshops and exercises take advantage of dedicated time with expert assistance to help better ensure retention of the lessons. Assignments continue to facilitate rigorous learning through application to the IBDS design project. Ultimately, all of the lessons learned are reflected in a well-coordinated and complete set of architectural drawings that represent a level of "buildability".

- **Life Safety:** The course takes the necessary next step beyond introductory level exposure to the regulatory context in addressing health, safety, and welfare of the public. Previous to, and Simultaneous with the IBDS studio design project, students learn about and investigate the different life-safety criteria, through building code research looking at: construction type, size, height, fire-suppression systems and means of egress. The students learn to understand through lectures by code officials reinforced by professional practitioners. Workshop exercises direct students to investigate particular areas of the

building code to address life-safety scenarios in rote exercises. Finally, an assignment given related to the IBDS studio project. In this assignment life-safety information is evident in a report, within the actual design and on dedicated sheets within the Architectural Documents set of drawings ("Code" Sheets with the DD Set).

- **Land Use:** As a precursor to design, students investigate the different property constraints of the IBDS project through existing plats, surveys and zoning codes. The students first learn through delivered lectures by professionals and in a workshop geared toward site analysis. Students then gather and analyze the information. The evidence of this effort is represented in an assignment report with limitation diagrams, a power point presentation and on dedicated sheets within the Architectural Documents set of drawings ("Code" Sheets with the DD Set).

- **Laws and Regulations:** By virtue of the objective design project, any and all governing laws and regulations are considered within their particular circumstances. In this course, the primary laws and regulations would include but not be limited to: zoning, building, & green codes, the Americans with Disabilities and the Fair Housing Acts. Previous to, and Simultaneous with the studio design project, students identify all relevant Laws and regulations, investigate their content, document those findings in a report, then decide how best to respond to those regulations with the design of the building and site on dedicated sheets within the Architectural Documents set of drawings ("Code" Sheets with the DD Set).

Successful completion of this course will enable students with demonstrated ability to:
- Understand relevant Building Code, ADA, Life-Safety and Land Use Regulations and their relevance to the current IBDS project;
- Understand MEP requirements and their relevance to the current IBDS project;
- Understand site characteristics, including urban context, historic fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.
- Understand the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an *emphasis on life-cycle cost accounting*
- Understand selection and detailing of building assemblies for the current IBDS project.

Assignments:
- Programming
- Site Analysis & Application
- Zoning Code Analysis & Application
- Building Code Analysis & Application
- Wall Sections/Assemblies
- Cost Considerations & Application

Quizzes:
- Programming
- Site Analysis & Application
- Zoning Code Analysis & Application
- Building Code Analysis & Application
- Wall Sections/Assemblies
- Cost Considerations & Application

<u>Benchmarks</u>
90% of students pass the course on their first attempt.
70% of students achieve a B- or higher grade.
75% of graduates 5 years past graduation have passed these NCARB tests:
- Project Management

- Programming & Analysis.
- Project Planning & Design.
- Project Development & Documentation.

SC.4 Technical Knowledge—How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

Program Response:

Our technical suite of courses presents theory, calculation and application as a solid and well-integrated sequence within our curriculum comprising environmental, construction and structural competency (technical trio) and is most fully-demonstrated within the capstone studio. The courses are intentionally crafted to provide the student an opportunity of 'thoughtful making'. Students learn tectonics through in-class projects, demonstrations and complementary design/build opportunities. By testing models, observing failures and thinking about potentials, our students learn that technology is part and parcel to design processes. Factors such as (a) established systems; (b) emerging systems; (c) technologies; (d) assemblies of building construction and (e) the assessment of these factors against project design, economics and performance can be traced within this trio of course sequences.

ARPL 333 - *Construction 1*
The first construction course explores the basic material components of buildings, including: Site & Soils, Foundations, Floors, Walls, Roofs, Moisture & Thermal, Doors / Windows, Special Construction. The second course explores applications of various building codes, reference standards, fully-detailed assemblies and other established systems and methods of building materials, processes and components. Lectures include novel construction methods explained in videos and through actual project examples. Hand-generated building and wall sections and scaled built models which study various assemblies are learned throughout the semester through design/build assignments.

ARPL 434 - *Construction 2*
This course reiterates and expands upon technical material stressed in ARPL 333 - *Construction 1*. Thus, it is offered as the second part of the introduction to construction concepts, technical information and strategies, material and systems resources and professional-level understanding of making contemporary buildings. The course offers numerous strategies by which the young architectural professional may continue to augment the material presented here during further graduate studies and professional experience. At the conclusion of the construction track, students are able to conduct material and assembly research and make judgments on the appropriateness of specific assemblies to projects. Through regular field trips to construction sites, they also understand contemporary issues in the design of a range of typical architectural assemblies and should have the ability to evaluate the performative qualities of various materials and assemblies.

ARPL 441 - *Structures I*
Similarly, this course explores the basics first as physical forces applied by loads are determined, and the resulting stresses in structural components are studied (again) through time-tested scenarios. All lessons involve technologies by applying calculations and how they are used to design structural systems. Case studies are evaluated in the lectures in order to describe examples of how these calculations are assessed in real project design.

ARPL 442 - *Structures II*
This course explores typology and materiality including horizontal spanning systems, vertical support systems, lateral bracing systems, whole building systems, high-rise and long-span

typologies. Students are empowered to explore established and emerging structural technologies through 'making and breaking' which involves using a structural concept to design, build and ultimately test a structural system for failure. 3D printing, model making to manifest mathematical diagrams from Structures I, hand work and testing of assemblies is introduced to their studio projects. Students develop a set of structural boards for their studio project, completing conceptual and load tracing diagrams for the structure and a structural model – which is how they assess the factors against project design and performance. In a similar assignment, economics via evaluating the cost of such systems is conducted.

ARPL 742 - *Advanced Structures*
This course provides students with the necessary skills to design simple structural system components in steel and concrete for gravity and lateral loads in accordance with current reference standards and code provisions such as those specifying the LRFD method, AISC steel construction manual, and FEMA for example. Novel structural methods are introduced via case studies while all lessons involve technological analysis using calculations in application. As in Structures I, Case studies are used to describe how methods are translated in actual projects.

ARPL 232 - *Environmental Design 1*
Environmental Design 1 provides students with the necessary computational and analytical skills to conceptualize and schematically design fully integrated passive building strategies. Students learn the principles of passive design strategies to achieve thermal and visual comfort as well as energy and water conservation. They learn analytical methods and how to apply them to building designs. Modules include Principles, Climate, Energy, Water, Air, Heating, Cooling, Site, Materials, Codes/Assessment Systems, and Synergies and directly align with the professor's co-authored publication "Heating, Cooling, Lighting: Sustainable Strategies Towards Net Zero Design" (Routledge 2021) which is based on the organization of this course. This course applies students' knowledge of passive strategies to evaluate their final studio project. The knowledge is used as a foundation for designing renewable and mechanical systems taught in Environmental Controls 2.

ARPL 331 - *Environmental Design 2*
This is an exceedingly technical course that integrates numeric analysis with holistic design principles. It is intended to provide students a full understanding of the relationship between architectural design and active building systems. Modules include: Synergy Loads, HVAC, Lighting, Electricity, Acoustics and Conveyance with a technical field specialist capping each module with a unique presentation about how they work with architects to apply the specialty of the module within building design. Building load calculations, heating and cooling systems, lighting design, electrical systems, acoustical systems, building water supply, plumbing systems, and fire protection are studied through theory and application. The culmination of the course is a final project which serves as a segue to their future *Lifelong Learning: The Environmental Resource Guide*, a student-designed manual containing all their work from the Environment Design sequence, intended to be a handbook for practice and a study aid for the ARE.

ARPL 402 - *Integrated Building Design Studio (IBDS)*
ARPL 432 - *Integrated Studio Supplement (ISS)*
This studio and its supplemental technical complement applies the methods and criteria learned in the technical courses to the design, performance and economics of their final IBDS studio project. For example, ISS measures cost estimating and value engineering competency. Prescriptive instructions regarding the level of detail in technical drawings, particularly assemblies, technologies, and systems and their assessment against project design and performance is administered through the ISS supplement course and external partnering firm/consultant evaluation.

Assessments:

The modes of assessment for ARPL 402 - *IBDS* include (1) a post-semester meeting of all IBDS faculty with associate deans; (2) Post-semester student evaluation specifically for this studio and supplement ISS; (3) Faculty are assigned to the final course presentations for evaluation if it follows the stated syllabus. Challenges, successes addressed and corrected the following year. The Associate Dean of UG/Grad and the professors of the technical trio sequence gauge continuous improvement and tracking of this series of courses through end-of-semester meetings.

SC.5 Design Synthesis—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

Program Response:

How the Program Achieves this Criterion:

The program ensures that students develop the ability to make design decisions, within architectural projects, that demonstrate the synthesis of user requirements, regulatory requirements, site conditions, accessible design, and the consideration of measurable environmental impacts. The students are obligated to demonstrate that they have developed these abilities.

The program achieves this goal to prepare students for the professional world primarily through two parallel courses that are taught and coordinated simultaneously. The courses are a rigorous building-design laboratory that simulates a professional setting. They are taught to all fourth-year undergraduate students and to all first year graduate students who come to the program with degrees from other schools or universities. The courses comprise nine (9) credit hours.

ARPL 402 and ARPL 602 - *Integrated Building Design Studio (IBDS)* 6 credit Studio Course

ARPL 432 and ARPL 632 - *Integrated Studio Supplement (ISS)* 3 credit Laboratory and Lecture Course

The courses are directed by a senior, tenured faculty member who is a licensed architect and who also teaches one of the studio sections. All studio sections are taught by practicing, licensed architects selected from the pool of visiting instructors and especially from among successful practitioners and leaders in the Washington, DC region. Each studio section is, in turn, sponsored by an established architecture firm in the Washington, DC region.

Sponsoring firms regularly contribute the time and talent of their professional staff in support of the two courses' goals. Selected practitioners serve as invited lecturers in the Supplement course, specifically addressing topics of programming requirements, zoning and building code requirements, site analysis, accessible design and environmental impact design decisions. Sponsoring firms regularly host their studio sections' students at their firm offices throughout the course to expose students to the professional and practical conduct, progress and collaboration processes of Design Synthesis and building integration. Sponsoring firms and studio section instructors engage the professional collaboration, instruction and design advice/critique of consulting experts. Each student team collaborates directly with the following consultants: Code expert/consultant; Sustainability expert/consultant; Structural Engineer; ME&P Engineers

Students assemble in teams of two due to the complexity of the course assignments and so as to inculcate the spirit of and demonstrate the need for collaboration in architectural design and design synthesis. Student team size is limited to two to ensure that each student is effectively performing to the rigorous tasks required by the course.

The Site and Building Design problem is selected and crafted so as to draw from each student effective demonstration of their abilities to make design decisions within architectural projects while demonstrating synthesis of other various project and regulatory requirements.

How the Program Evaluates this Criterion:

Assessments:
ARPL 402 - *Integrated Building Design Studio* (IBDS 6 credits)
Instructional Method: This course takes advantage of a laboratory like framework in tandem with ISS. While the ISS delivers preparatory lessons associated with the design project, the IBDS studio instructor engages in conventional design studio and Session Desk Critiques on a regular and intensive basis. On a less frequent but nonetheless regular basis, sponsoring firms host their studio sections' students at their firm offices. This achieves many desirable outcomes, among which are: 1) regular, "third-party" professional critiques of the students' work product; 2) direct, personal experience of the real-world requirement for and impact of integrated architectural design; 3) exposure to and direct, in-person work with, practicing engineers; and 4) students' exposure to the professional and practical conduct, progress and collaborations that form truly effective Integrated Building Design. Student evaluations are ultimately achieved through the review of the studio projects and their final product of a set of Architectural Documents approximating a 100% DD set of drawings. Course Evaluations are ultimately achieved through the review of the studio means, methods, and outcomes provided by the Sponsor firms, consulting engineers, and course instructors.

This course achieves Building Integration criteria by obligating students to demonstrate the following abilities:

- Program/User requirements: The ability to prepare a comprehensive program for an architectural project that includes: an assessment of client, user and stakeholder 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.

- Regulatory Requirements: The ability to design sites, facilities, and systems that are responsive to relevant codes and regulations and include the principles of life-safety (emphasis of egress) and accessibility standards.

- Site Conditions: The ability to understand and 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.

- Accessible Design: The ability to design sites, facilities, and systems that are responsive to relevant codes and regulations with regard to accessibility standards.

- Environment impacts of design decisions: The ability to produce an architecture project that addresses environmental impacts of certain design decisions and seeks to mitigate any impacts through the careful consideration and implementation of environmental strategies to achieve required Performance Criteria.

Assessments:

Means of evaluating achievement relative to course and program goals.

Assignments
- 60% Design Development Set – Firm Presentation
- 90% Design Development Set – Firm Presentation
- 100% DD Set – Final Presentation

Benchmarks
90% of students pass the course on their first attempt.
70% of students achieve a B- or higher grade in this course.
75% of the program's graduates have passed the following NCARB Architecture Registration Examinations tests no more than 5 years following their graduation:
- Programming & Analysis.
- Project Planning & Design.
- Project Development & Documentation.

ARPL 432 - *Integrated Studio Supplement (ISS)*
This course, along with the IBDS studio, is the culmination of a curricular trajectory intended to address Design Synthesis. The goal of this course is to provide additional support to the IBDS studio, by directly addressing particularly technical aspects of an architectural project. This course's format facilitates instruction on matters not conducive to the studio environment that nonetheless are vital to the success of any truly integrated building design: programming requirements, zoning and building code requirements, site analysis, accessible design, constructability, construction cost estimation, project costs, and environmental impact design decisions. In this class, students achieve a level of ability and understanding of these subjects such that they can then be incorporated/integrated within the aesthetic vision of a studio design project to become one synthetic whole.

Instructional Method: The course content is delivered through lectures, workshops and assignments. Lectures on various topics are provided by sponsoring firms, local practitioners and attendant faculty. Workshops and exercises take advantage of dedicated time with expert assistance to help better ensure retention of the lessons with hands-on engagement. Assignments continue to facilitate rigorous learning through application to the IBDS design project. Ultimately, all of the lessons learned are reflected in a well-coordinated and complete set of architectural drawings that represent a level of "buildability".

This course achieves design synthesis criteria by obligating students to demonstrate the following abilities:

Programming / User Requirements: Gone now are the days of professors writing the project programs. The courses' syllabi set forth project objectives and basic project requirements only. Students are required to develop the Project Program themselves.

The course requires students to demonstrate ability to prepare a comprehensive program for an architectural project that includes: an assessment of client, user and stakeholder 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.

Lectures and work sessions are dedicated to programming objectives and methods and are presented by practicing professionals. Students' Project Programs are a required deliverable for the course.

Regulatory Requirements: The ability to design sites, facilities, and systems that are responsive to relevant codes and regulations and include the principles of life-safety (emphasis of egress) and accessibility standards. Identification and review of the actual, in-force zoning and 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. Lectures and work sessions are dedicated to programming objectives and methods and are presented by practicing professionals.

Code analysis:A real site was selected in Washington, DC also so that students would be held to an established, referenceable Zoning Code and enacted construction codes. Both Zoning and Construction Code Analysis was undertaken very early in the course so that these analyses would beneficially contribute to the students' Programming efforts. (Please see above.)

Construction Code Analysis was thereafter an on-going component of the design phases throughout the studio course. (Please also see below under Sustainable Strategies.)

Site Conditions: A real site was selected in Washington, DC so that students would visit, tour and analyze the site in person. Tours were given by each studio professional to demonstrate on-site site analysis. Lectures/demonstrations were given (ISS) and workshops were conducted (IBDS) so as to instruct students in research, site topography, utilities, building location and orientation; and architectural, urban, civic, and cultural contexts. The Project's site is carefully selected so that the students are challenged to develop the ability to understand and 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. All of these were then shown to the students as impacting Programming, Code Analysis, Sustainability Strategies, General Mobility/Life Safety and Universal Design.

Principles and practices of Accessible and Universal Design: Attention was given, using both courses, to accessibility and mobility challenges that public building design must address. Accessibility Codes, the IBC, the A.D.A. and Universal Design principles were presented with the requirement that the student's projects must be shown to comply at a minimum with the enacted Washington, DC Code. That said, the principles of Universal Design were held as higher goals for students to attain whenever and wherever possible. Special attention was given to corridor widths, door approaches, door widths and swings, restroom design, office layout, elevator locations and sizes, ramp design requirements, and sloped sidewalks. In conjunction with the issues of general mobility set forth above, all this was communicated to the students by means of detailed code analysis, lectures/demonstrations (ISS), and in-studio workshops (IBDS) so as to instruct students in design accommodation and adjustment to incorporate and comply with established accessibility codes and goals.

Sustainability strategies & Environment impacts: A peculiarity of Washington, DC -for which this Program is very happy- is that it is one of a very few cities that has enacted a Green Construction Code, a code requiring sustainable design. While sustainability strategies are taught in this Program's third year, the IBDS and ISS courses were changed to directly address integration of sustainable design as a requirement for course success. Green Construction Code Analysis was undertaken very early in the course so that these analyses would beneficially contribute to the students' Programming efforts and was thereafter an on-going component of the design phases throughout the studio course.

Lectures/demonstrations were given (ISS) and workshops were conducted (IBDS) so as to instruct students in design integration of sustainable design in compliance with enacted code.

Furthermore, once these matters were taught, students were shown how they correctly inform both pre-design, code-analysis, programming and site design efforts that form parts of all design projects.

All of the above sub-criteria for successful Building Integration in turn require further instruction in matters directly related to and supportive of them. In these courses they included:

General mobility and entry/egress safety: The project site, the proposed building's size and its use were all intentionally selected to present the course's students with serious challenges to solve and also to increase their awareness of the critical importance of occupants' mobility and life safety. The selected site slopes across its length at least 4 feet vertically, making the entry level something to be addressed at the very outset of both site and building design. The number of floors required to meet the project's objectives necessitated a design strategy for all vertical circulation including but not limited to the life safety egress stairways; the size of the building footprint brought limitations of horizontal egress pathways into consideration; occupancy calculations by floor impacted egress stair widths and required areas of refuge; stair locations and their exits to the buildings' exteriors impacted architectural design aesthetics and composition. All this was communicated to the students by means of detailed code analysis, lectures/demonstrations (ISS), and in-studio workshops (IBDS) so as to instruct students in design accommodation and adjustment to incorporate and comply with established life-safety codes.

Important Note: These courses are structured and taught to address all the Student Criteria 6 – Building Integration requirements so that, in this Program, and with these two courses, Design Synthesis and Building Integration matters are themselves integrated into a unified approach to building design.

In assessing this Program's response to SC.5 we ask that the NAAB simultaneously consider the SC.6 report included herein.

Additionally, the ISS course specifically addressed Construction Cost as the Program's response to the program's unmet conditions:

Cost estimation: In addressing Cost Estimation the ISS course, with its lecture/demonstration format, was judged the best venue for discussing and working through questions of cost. In an open-format question-and-answer session conducted by a practicing architecture firm principal, students were asked to identify different kinds of costs associated with an architectural project. Filling the chalk-board the student-identified costs categories (and a few more) were then individually discussed and categorized as either a "Project Cost" or a "Construction Cost". Additionally the course instruction included a detailed presentation from a currently practicing professional cost estimator. Pertaining to construction cost estimation, students were instructed on a dollars-per-square-foot approach basis common with design professionals (as opposed to a materials and labor take-off approach appropriate to contractors.) Students used their own designs to analyze them for varying construction costs per square foot; breaking their projects down by cost per area, and, by this means, developing a base-line cost budget. Also discussed at length were contingencies and their uses, and value engineering as both a design tool and a budgeting tool. All this culminated in a demonstration of how all the cost categories impact one another and form part of an overall Project Cost Budget.

Because design drawings are not good means of demonstrating understanding in cost estimation, students were tested on their comprehension of the above terms. Concepts and tasks demonstrate their understanding of cost estimation.

Assessments:
The Program evaluated student achievement relative to course and program goals in the following ways:

1. Workshop & class Participation: Evidence of participation in class and workshops is recorded in daily submission of comments and questions about the day's topic.

2. Assignments & Quizzes address the following Building Integration topics.

    a. Programming
    b. Site Analysis & Application
    c. Zoning Code Analysis & Application
    d. Building Code Analysis & Application
    e. Structural systems
    f. Wall Sections/Assemblies
    g. Mechanical systems
    h. Electrical systems
    i. Plumbing systems
    j. Sustainable strategies
    k. Cost Estimation, Cost Considerations & Application

3. Project Design Formal Reviews by Course Instructors, Practicing Professionals and Sponsor Firms:

- 60% Design Development Set
- 90% Design Development Set
- 100% DD Set

Benchmarks
90% of students pass the course on their first attempt.
70% of students achieve a B- or higher grade in this course.
75% of the program's graduates 5 years past graduation have passed the following NCARB Architecture Registration Examinations tests no more than 5 years following their graduation:

Course Student Achievement Summary – Based on Benchmarks
After evaluating the assessment material, it appears that the students have achieved the established benchmarks or not

- Project Management
- Programming & Analysis.
- Project Planning & Design.
- Project Development & Documentation.

Curricular Modifications for Improvement

Please refer to the Introduction to this report, **Progress since Previous Visit.**

In the Spring 2022 Semester, these two Building Integration courses - while following the Program's previous, general framework for them – were significantly re-organized and re-staffed in response to the NAAB's welcome communication.

Further, at the semester's end, the dean, senior faculty and the courses' instructors convened to discuss the implemented changes, their impacts and outcomes, and ways to capture the successes while further improving the course.

SC.6 Building Integration—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Program Response:

How the Program *Achieves* this Criterion:

The program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions, by obligating students to demonstrate that they have developed these abilities.

The program achieves this goal by facilitating student ability in Design Synthesis primarily through two courses–a studio course and a lecture course–taught and coordinated simultaneously. These co-requisite courses have been developed to specifically and directly respond to the need for students to be prepared for design synthesis in the professional world. The particular way these courses are structured simulates the professional setting as a rigorous building-design laboratory. Together they are taught to all fourth-year undergraduate students and to all first year graduate students who come to the program with degrees from other schools or universities.

The courses comprise nine (9) credit hours. They are:

Integrated Building Design Studio 402 (undergraduates)/602 (graduates) 6 credit hours

Integrated Building Design Studio Supplement 432 (undergraduates)/ 632 (graduates) 3 credit hours

These courses are directed by a senior, tenured faculty member who is a licensed architect and who also teaches one of the studio sections. All studio sections are taught by practicing, licensed architects selected from among the adjunct faculty and especially from among successful practitioners and leaders in the Washington, DC region. Each studio section is, in turn, sponsored by an established Architecture firm in the Washington, DC region.

Sponsoring firms regularly contribute the time and talent of their professional staff in support of the two courses' goals. Selected practitioners serve as invited lecturers in the Supplement course, specifically addressing topics of programming requirements, zoning and building code requirements, site analysis, accessible design and environmental impact design decisions. Sponsoring firms regularly host their studio sections' students at their firm offices throughout the course to expose students to the professional and practical conduct, progress and collaboration processes of Design Synthesis and building integration. Sponsoring firms and studio section instructors engage the professional collaboration, instruction and design advice/critique of consulting experts. Each student team collaborates directly with the following consultants:

Code expert/consultant; Sustainability expert/consultant; Structural Engineer; ME&P Engineers

Students assemble in teams of two due to the complexity of the two courses' assignments and so as to inculcate the spirit of, and demonstrate the need for, collaboration in architectural design and design synthesis. Student team size is limited to two to ensure that each student is effectively performing to the rigorous tasks required by the course.

The Site and Building Design problem is selected and crafted so as to draw from each student effective demonstration of their abilities to make design decisions within architectural projects while demonstrating synthesis of other various project and regulatory requirements.

How the Program Evaluates this Criterion:

ARPL 402 - *Integrated Building Design Studio (IBDS)*
Instructional Method: This course takes advantage of a laboratory like framework in tandem with ISS. While the ISS delivers preparatory lessons associated with the design project, the IBDS studio instructor engages in conventional design studio Session and Desk Critiques on a regular and intensive basis. On a less frequent but nonetheless regular basis, sponsoring firms host their studio sections' students at their firm offices. This achieves many desirable outcomes, among which are: 1) regular, "third-party" professional critiques of the course student work product; 2) direct, personal experience of the real-world requirement for impact upon integrated architectural design; 3) expose students to direct, in-person work with, practicing engineers; and 4) let students see, first hand, professional and practical conduct, progress and collaboration that form truly effective of Integrated Building Design. Student Evaluations are ultimately achieved through the review of the studio projects and their final product of a set of Architectural Documents approximating a 100% DD set of drawings. Course Evaluations include feedback from Sponsor firms and consulting engineers.

This course achieves design synthesis criteria by obligating students to demonstrate the following abilities:

Integration of building envelope systems and assemblies: The ability to consider, propose and develop the design and assembly of the building's exterior envelope in ways that support the design vision, comply with energy conservation codes, are buildable, and that deny water infiltration.

Integration of building structural systems: The ability to consider, propose and develop the design and assembly of the building's structure from foundation to roof in ways that support the design vision and are reasonable, safe and buildable.

Integration of building environmental control systems: The ability to consider, propose and develop the design and assembly of the passive methods and active infrastructures that manage and maintains a building's internal environment, and to do so in ways that support the design vision and are reasonable, maintainable, efficient, safe and buildable.

Integration of life safety systems: The ability to consider, propose and incorporate into the design the necessary life safety systems and infrastructures, and to do so in compliance with life safety codes in ways that support the design vision and are reasonable, effective, safe and buildable.

Assessments:
Means of evaluating achievement relative to course and program goals.

Assignments
- 60% Design Development Set – Firm Presentation
- 90% Design Development Set – Firm Presentation
- 100% DD Set – Final Presentation

Benchmarks
90% of students pass the course on their first attempt.
70% of students achieve a B- or higher grade.
75% of the program's graduates have passed the following NCARB Architecture Registration Examinations tests no more than 5 years following their graduation::
- Programming & Analysis.
- Project Planning & Design.
- Project Development & Documentation.

ARPL 432 - *Integrated Studio Supplement (ISS)*
This course, along with the IBDS studio, is the culmination of a curricular trajectory intended to address Design Synthesis. The goal of this course is to provide additional support to the IBDS studio, by directly addressing particularly technical aspects of an architectural project. This course's format facilitates instruction on matters not conducive to the studio environment that nonetheless are vital to the success of any truly integrated building design: programming requirements, zoning and building code requirements, site analysis, accessible design, constructability, construction cost estimation, project costs, and environmental impact design decisions. In this class, students achieve a level of ability and understanding of these subjects such that they can then be incorporated/integrated within the aesthetic vision of a studio design project to become one synthetic whole.

Instructional Method: The course content is delivered through lectures, workshops and assignments. Lectures on various topics are provided by sponsoring firms, local practitioners and attendant faculty. Workshops and exercises take advantage of dedicated time with expert assistance to help better ensure retention of the lessons with hands-on engagement. Assignments continue to facilitate rigorous learning through application to the IBDS design project. Ultimately, all of the lessons learned are reflected in a well-coordinated and complete set of architectural drawing that represent a level of "buildability". This course achieves design synthesis criteria by obligating students to demonstrate the following abilities:

Integration of building envelope systems and assemblies: Students were required to research, conceive, design, develop and refine their buildings' exterior wall assemblies from foundation to roof. This involves especially energy code research; understanding of how both air and water and their movement interacts with roofs, walls and foundations; building materials' physical characteristics, benefits and limitations; the interactivity between disparate materials; constructability; the physical relationship of a building's envelope to its structural system(s); etc.

Integration of building structural systems: Students were required to conceive, design, develop and refine comprehensive structural solutions for their building designs. The structural design has to be developed from foundation to roof. Practicing, professional structural engineers, introduced to each studio section by its sponsoring firm, worked with and instructed the students on the particulars of their individual designs and also instructed the studios as a whole on general principles that apply to all the student's building designs. Students learned first-hand and had to work to resolve and integrate the significant impacts that structural systems have on architectural design, and on mechanical system design and arrangement within and without a building. Students also learned the relationship of structure not only to a building's roofs, floorplates and foundations, but also structural system's relationship to a building's exterior wall assemblies. (See above)

Integration of building environmental control systems: Students were required to conceive, design, and develop energy efficient, well-considered passive and active means of heating ventilating and cooling the building's interior environment along with careful consideration of energy sources and energy consumption. Their designs were required to illustrate the kind of systems, their related components, and their arrangement throughout the building. Practicing, professional ME&P engineers, introduced to each studio section by its sponsoring firm, worked with and instructed the students on the particulars of their individual designs and also instructed the studios as a whole on general principles that apply to all the student's building designs. Students learned first-hand and had to work to resolve and integrate the significant impacts that active mechanical and passive environmental systems have on architectural design, and on structural system design within and without a building. Students also learned the relationship of mechanical systems' to a building's roofs, and foundations. (See above)

Integration of life safety systems: Students were required to research, conceive, locate, design, develop and refine their buildings' life safety infrastructure. Stairways, exist egress pathways and

discharges, travel distances, room, floor and building occupancies, etc. were all taught and required to be individually calculated, analyzed and accommodated within each building design. General principles and code analysis were demonstrated by course instructors and by sponsoring firms' professionals, while specific design challenges were addressed in desk-critique settings by registered architect course instructors.

The project site, the proposed building's size and its use were all intentionally selected to present the course's students with serious challenges to solve and also to increase their awareness of the critical importance of occupants' mobility and life safety. The selected site slopes across its length at least 4 feet vertically, making the entry level something to be addressed at the very outset of both site and building design. The number of floors required to meet the project's objectives necessitated a design strategy for all vertical circulation including but not limited to the life safety egress stairways; the size of the building footprint brought limitations of horizontal egress pathways into consideration; occupancy calculations by floor impacted egress stair widths and required areas of refuge; stair locations and their exits to the buildings' exteriors impacted architectural design aesthetics and composition. All this was communicated to the students by means of detailed code analysis, lectures/demonstrations (ISS), and in-studio workshops (IBDS) so as to instruct students in design accommodation and adjustment to incorporate and comply with established life-safety codes.

Later in the students' design development stages, practicing, and professional Electrical engineers, introduced to each studio section by its sponsoring firm, worked with and instructed the students on the particulars of their individual designs' requirements for powered life-safety emergency warning systems and their array throughout the building.

By these means students learned first-hand and had to work to resolve and integrate the significant impacts that life-safety requirements have on architectural design.

All of the above sub-criteria for successful *Building Integration* in turn require further instruction in matters directly related to and supportive of them. In these courses they include:

- Regulatory Requirements*:* The ability to design sites, facilities, and systems that are responsive to relevant codes and regulations and include the principles of life-safety (emphasis of egress) and accessibility standards. Identification and review of the actual, in-force zoning and 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.

Lectures and work sessions are dedicated to programming objectives and methods and are presented by practicing professionals.

- Site Analysis*:* A real site was selected in Washington, DC so that students would visit, tour and analyze the site in person. Tours were given by each studio professional to demonstrate on-site site analysis. Lectures/demonstrations were given (ISS) and workshops were conducted (IBDS) so as to instruct students in research, site topography, utilities, building location and orientation; and architectural, urban, civic, and cultural contexts. The Project's site is carefully selected so that the students are challenged to develop the ability to understand and 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. All of these were then shown to the students as impacting Programming, Code Analysis, Sustainability Strategies, General Mobility/Life Safety and Universal Design.

- Code analysis: A real site was selected in Washington, DC also so that students would be held to an established, referenceable Zoning Code and enacted construction codes.

Both Zoning and Construction Code Analysis was undertaken very early in the course so that these analyses would beneficially contribute to the students' Programming efforts. (Please see above.)

- Construction Code Analysis was thereafter an on-going component of the design phases throughout the studio course. (Please also see below under Sustainable Strategies.)

- Sustainability strategies & Environment impacts: A peculiarity of Washington, DC -for which this Program is very happy- is that it is one of a very few cities that has an enacted a Green Construction Code, a code requiring sustainable design. While sustainability strategies are taught in this Program's third year, the IBDS and ISS courses were changed to directly address integration of sustainable design as a requirement for course success. Green Construction Code Analysis was undertaken very early in the course so that these analyses would beneficially contribute to the students' Programming efforts and was thereafter an on-going component of the design phases throughout the studio course. Lectures/demonstrations were given (ISS) and workshops were conducted (IBDS) so as to instruct students in design integration of sustainable design in compliance with enacted code.

Furthermore, once these matters were taught, students were shown how they correctly inform both pre-design, code-analysis, programming and site design efforts that form parts of all design projects.

Important Note: These courses are structured and taught to also address all the Student Criteria 5 – Design Synthesis requirements so that, in this Program, and with these two courses, Design Synthesis and Building Integration matters are themselves integrated into a unified approach to building design.

In assessing this Program's response to SC.6 we ask that the NAAB simultaneously consider the SC.5 report included herein.

Assessments:
1. Workshop & class Participation: Evidence of participation in class and workshops is recorded in daily submission of comments and questions about the days topic.

2. Assignments & Quizzes:
   a. Programming
   b. Site Analysis & Application
   c. Zoning Code Analysis & Application
   d. Building Code Analysis & Application
   e. Structural systems
   f. Wall Sections/Assemblies
   g. Mechanical systems
   h. Electrical systems
   i. Plumbing systems
   j. Sustainable strategies
   k. Cost Considerations & Application

3. Project Design Formal Reviews by Course Instructors, Practicing Professionals and Sponsor Firms:

- 60% Design Development Set
- 90% Design Development Set
- 100% DD Set

Benchmarks:

90% of students pass the course on their first attempt.
70% of students achieve a B- or higher grade.
75% of the Program's graduates have passed the following NCARB Architecture Registration Examinations tests no more than 5 years following their graduation:

- Project Management
- Programming & Analysis.
- Project Planning & Design.
- Project Development & Documentation.

Curricular Modifications for Improvement

Please refer to this Program's Response to NAAB Communication on "Unmet Conditions". In the Spring 2022 Semester, these two Building Integration courses - while following the Program's previous, general framework for them – were significantly re-organized and re-staffed in response to the NAAB's welcome communication.
Further, at the semester's end, the dean, senior faculty and the courses' instructors convened to discuss the implemented changes, their impacts and outcomes, and ways to capture the successes while yet further improving the course.

4—Curricular Framework

This condition addresses the institution's regional accreditation and the program's degree nomenclature, credit-hour and curricular requirements, and the process used to evaluate student preparatory work.

4.1 Institutional Accreditation

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

Program Response: Full letter can be found in the appendix and here: Middle States-July 2021.pdf

MSCHE
MIDDLE STATES COMMISSION ON HIGHER EDUCATION

July 7, 2021

Mr. John Garvey
President
Catholic University of America, The
Cardinal Station
Washington, DC 20064

Dear Mr. Garvey:

The Middle States Commission on Higher Education took action on June 24, 2021. This serves as official notice that an accreditation action has been taken and now appears on the institution's Statement of Accreditation Status (SAS) which can be found on your institution directory page at www.msche.org.

If any of the information contained within the action appears to be factually incorrect, please send an email within 30 calendar days of the action to actions@msche.org.

Please visit the Commission's policies and procedures for more information:

Accreditation Actions Policy and Procedures

Accreditation Review Cycle and Monitoring Policy and Procedures

Communication in the Accreditation Process Policy and Procedures

Public Disclosures Policy and Procedures

Standards for Accreditation and Requirements of Affiliation

For questions about the Commission's actions, please contact the institution's assigned Commission staff liaison. Questions from the public about the institution's accreditation phase or accreditation status can be directed to communications@msche.org.

Sincerely,

Heather F. Perfetti, J.D., Ed.D.
President

www.msche.org | @mscheorg

Accreditation Summary

For more information, see the Commission's **Accreditation Actions Policy and Procedures**.

Phase: Accredited

Status: Accreditation Reaffirmed

Accreditation Granted: 1921

Last Reaffirmation: 2020

Next Self-Study Evaluation: 2027-2028

Next Mid-Point Peer Review: 2024

MSCHE
MIDDLE STATES COMMISSION ON HIGHER EDUCATION
3624 Market Street
Suite 2 West
Philadelphia, PA 19104
www.msche.org
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STATEMENT OF ACCREDITATION STATUS

The Statement of Accreditation Status (SAS) is the official statement of the Middle States Commission on Higher Education (MSCHE) about each institution's current accreditation status and scope of accreditation. The SAS also provides a brief history of the actions taken by the Commission.

Institution:	**CATHOLIC UNIVERSITY OF AMERICA, THE**	Washington, DC
Address:	Cardinal Station Washington, DC 20064	
Phone:	(202) 319-5000	
URL:	**www.cua.edu**	
Accreditation Liaison Officer (ALO):	Dr. Duilia de Mello	
Commission Staff Liaison:	Dr. Kushnood Haq, Vice President	

4.2 Professional Degrees and Curriculum

The NAAB accredits professional degree programs with the following titles: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and optional studies.

4.2.1 Professional Studies. Courses with architectural content required of all students in the NAAB-accredited program are the core of a professional degree program that leads to licensure. Knowledge from these courses is used to satisfy Condition 3—Program and Student Criteria. The degree program has the flexibility to add additional professional studies courses to address its mission or institutional context. In its documentation, the program must clearly indicate which professional courses are required for all students.

Programs must include a link to the documentation that contains professional courses are required for all students.

Program Response:

See 4.2.4 and 4.2.5 below.

Links to professional courses required by all students:

Bachelor of Science in Architecture: https://architecture.catholic.edu/academics/undergraduate-programs/architecture/index.html

Master in Architecture:
https://architecture.catholic.edu/academics/arch-graduate-programs/index.html

4.2.2 General Studies. An important component of architecture education, general studies provide basic knowledge and methodologies of the humanities, fine arts, mathematics, natural sciences, and social sciences. Programs must document how students earning an accredited degree achieve a broad, interdisciplinary understanding of human knowledge.

In most cases, the general studies requirement can be satisfied by the general education program of an institution's baccalaureate degree. Graduate programs must describe and document the criteria and process used to evaluate applicants' prior academic experience relative to this requirement. Programs accepting transfers from other institutions must document the criteria and process used to ensure that the general education requirement was covered at another institution.

Programs must state the minimum number of credits for general education required by their institution and the minimum number of credits for general education required by their institutional regional accreditor.

Program Response:
General education at The Catholic University of America is diverse and mission related at both University and School levels. Courses in philosophy, theology, math, rhetoric and composition are required in the undergraduate program. They engage students in the quest for knowledge through faith and reason. Our students earn 171 total credits–3 credits above the minimum requirement.

See 4.2.4 and 4.2.5 below.

4.2.3 Optional Studies. All professional degree programs must provide sufficient flexibility in the curriculum to allow students to develop additional expertise, either by taking additional courses offered in other academic units or departments, or by taking courses offered within the department offering the accredited program but outside the required professional studies

curriculum. These courses may be configured in a variety of curricular structures, including elective offerings, concentrations, certificate programs, and minors.

The program must describe what options they provide to students to pursue optional studies both within and outside of the Department of Architecture.

Program Response:

Minors:
Undergraduate students can choose from more than 60 minors and certificate programs as a way of broadening their education beyond their chosen major.
List of minors: https://www.catholic.edu/academics/undergraduate/minors/index.html

Popular amongst Architecture and Planning students is the Interdisciplinary Minor in Sustainability which requires six (6) courses that cover Social Sustainability, Environmental Sustainability and Economic Sustainability.

Sustainability Minor approved courses, forms and outline:
https://architecture.catholic.edu/academics/undergraduate-programs/sustainability-minor/index.html

Joint Degree:
While students may pursue double majors on an individual track, a five-year joint degree in Architecture and Engineering is a pre-professional architecture and professional civil engineering program that leads to a Bachelor of Science in Architecture and Bachelor of Civil Engineering. This is a five-year, 187 credit-hour joint program capitalizing on the related disciplines of architecture and civil engineering. It includes general studies. The pathway to graduation enables students to choose one or the other discipline without penalty within the first three years of study.

Joint Program description here:
https://architecture.catholic.edu/academics/undergraduate-programs/architecture-and-civil-engineering/index.html

Curriculum 2021/2022 here:
https://architecture.catholic.edu/_media/undergradcurriculum20212022jointdegree.pdf

Graduate Concentrations:
Our program offers concentrations in Sacred Space/Cultural Studies, Technology and Media in Architecture and Interiors, Urban Practice, and Classical Architecture and Urbanism. Students work directly with their concentration director to curate their studies.

List and description of our concentrations: https://architecture.catholic.edu/academics/arch-graduate-programs/concentrations/index.html

Elective courses:
Our professional electives are placed mid to end of the student curriculum allowing them to build up proficiency in architectural skills and history. We offer four electives in the Bachelor of Science in Architecture degree track and three to five electives in the Master of Architecture degree track. Electives allow students to pursue a concentrated course of study. Undergraduate students in the senior year join graduate students to enroll in vertical design studios taught within the concentrations.

See 4.2.4 and 4.2.5 below.

NAAB-accredited professional degree programs have the exclusive right to use the B. Arch., M. Arch., and/or D. Arch. titles, which are recognized by the public as accredited degrees and therefore may not be used by non-accredited programs.

Programs must list all degree programs, if any, offered in the same administrative unit as the accredited architecture degree program, especially pre-professional degrees in architecture and post-professional degrees.

Program Response:

Degree programs offered by The Catholic University of America, School of Architecture and Planning:

Bachelor of Arts with a Major in Architectural Studies (B.A. Arch. Studies)
Bachelor of Science in Architecture (B.S. Arch.) – pre-professional
Master in Architecture (M. Arch. 2) – professional
Master in Architecture (M. Arch. 3) – professional
Master of Science in Net Zero Design (M.S.N.Z.D.) – post-professional

The number of credit hours for each degree is outlined below. All accredited programs must conform to minimum credit-hour requirements established by the institution's regional accreditor. Programs must provide accredited degree titles, including separate tracks.

4.2.4 Bachelor of Architecture. The B. Arch. degree consists of a minimum of 150 semester credit hours, or the quarter-hour equivalent, in academic coursework in general studies, professional studies, and optional studies, all of which are delivered or accounted for (either by transfer or articulation) by the institution that will grant the degree. Programs must document the required professional studies courses (course numbers, titles, and credits), the elective professional studies courses (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

Program Response:

Not applicable.

4.2.5 Master of Architecture. The M. Arch. degree consists of a minimum of 168 semester credit hours, or the quarter-hour equivalent, of combined undergraduate coursework and a minimum of 30 semester credits of graduate coursework. Programs must document the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for both the undergraduate and graduate degrees.

Program Response:

NAAB Degree Offered:	**Master in Architecture (M. Arch. 2)**
Pre-requisite Degree:	Bachelor of Science in Architecture (126 credit-hours)
Total Number of Credits:	Bachelor of Science in Architecture (126 credit-hours) Master of Architecture (60 credit-hours or 45 credit-hours with Advanced Standing)
List of Courses / Credit Hours:	See Below

List of Concentrations:

- Sacred Space/Cultural Studies
- TMAIN (Technology and Media in Architecture and Interiors)
- Classical Architecture and Urbanism
- Urban Practice

Full-time status requires enrollment in 10 or more credit-hours per semester. Part-time status requires enrollment in 9 or less credit-hours per semester.

Bachelor of Science in Architecture

COURSE NO.	CLASS	Credit Hours	
ARPL101	Architectural Foundations: Intro to Architecture	3	Fall 1
ENG101	Rhetoric and Composition	3	Fall 1
MATH108/FREE	Math 108 or Free Elective	3	Fall 1
PHIL201	The Classical Mind	3	Fall 1
LIT*	Literature Elective	3	Fall 1
ARPL102	Architectural Foundations 2	3	Spring 1
PHIL202	The Modern Mind	3	Spring 1
TRS201	Foundations of Theology	3	Spring 1
MATH111	Calculus for Social-Life Sci I	3	Spring 1
PHYS101	20th-Century Concepts	3	Spring 1
ARPL201	Architectural Foundations 3	3	Fall 2
ARPL211/**FAE**	History of Architecture 1	3	Fall 2
ARPL383	Ethics + Stewardship	3	Fall 2
ARPL333	Construction 1	3	Fall 2
ARPL241	Theory of the Orders	3	Fall 2
ARPL202	Architectural Design 1	6	Spring 2
ARPL212	History of Architecture 2	3	Spring 2
ARPL232	Environmental Design 1	3	Spring 2
ARPL434	Construction 2	3	Spring 2
ARPL301	Architectural Design 2	6	Fall 3
ARPL311	History of Architecture 3	3	Fall 3
ARPL441	Structures 1	3	Fall 3
ARPL331	Environmental Design 2	3	Fall 3

ARPL 221	Pre-Design	3	Fall 3
ARPL302	Architectural Design 3	6	Spring 3
ARPL442	Structures 2	3	Spring 3
ARPL314	Introduction to Architectural Theory	3	Spring 3
TRS202A or B	The Church and the Human Person	3	Spring 3
ARPL401	Architectural Design 4	6	Fall 4
ARPL421	Digital Construction Documents	3	Fall 4
SSE**	Social Science Elective	3	Fall 4
ARPL/PRELEC	Program Elective	3	Fall 4
ARPL/PRELEC	Program Elective	3	Fall 4
ARPL402	Integrated Bldg. Design Studio (IBDS)	6	Spring 4
ARPL432	Integrated Studio Supplement (ISS)	3	Spring 4
ARPL/PRELEC	Program Elective	3	Spring 4
ARPL/PRELEC	Program Elective	3	Spring 4
	TOTAL CREDITS	**126**	

Distribution of Coursework:	Credit Hours
Professional (Required Architecture Courses)	84
General (University Required General Education)	30
Optional (Architecture Program Electives)	12

Master of Architecture 2 - CUA graduate

COURSE NO.	CLASS	Credit Hours	
ARPL601	Graduate Design Studio 1	6	Fall 1
ARPL636	Design Process and Methods	3	Fall 1
ARPL	Advanced Theory Elective	3	Fall 1
ARPL	Program Elective 1	3	Fall 1
ARPL603	Graduate Design Studio 2	6	Spring 1
ARPL	Program Elective 2	3	Spring 1
ARPL742	Advanced Structures	3	Spring 1
ARPL	Program Elective 3	3	Spring 1

ARPL701	Graduate Design Studio 3	6	Fall 2
ARPL696C	Thesis 1	3	Fall 2
500+ Elective	Free Elective	3	Fall 2
ARPL	Program Elective 4	3	Fall 2
ARPL696D	Thesis 2	6	Spring 2
ARPL 722	Practice Management	3	Spring 2
ARPL	Program Elective 5	3	Spring 2
ARPL	Program Elective 6	3	Spring 2
	TOTAL CREDITS	**60**	

Distribution of Coursework:	Credit Hours
Professional (Required Architecture Courses)	36
General (Free elective)	3
Optional (Architecture Program Electives)	21

Master of Architecture 2 - Non-CUA graduate

COURSE NO.	CLASS	Credit Hours	
ARPL601	Graduate Design Studio 1	6	Fall 1
ARPL636	Design Process and Methods	3	Fall 1
ARPL	Advanced Theory Elective	3	Fall 1
ARPL	Program Elective 1	3	Fall 1
ARPL602	Integrated Building Design Studio	6	Spring 1
ARPL 632	IBDS Supplement	3	Spring 1
ARPL742	Advanced Structures	3	Spring 1
ARPL	Program Elective 2	3	Spring 1
ARPL603	Graduate Design Studio 2	6	Fall 2
ARPL696C	Thesis 1	3	Fall 2
500+ Elective	Free Elective	3	Fall 2
ARPL	Program Elective 3	3	Fall 2
ARPL696D	Thesis 2	6	Spring 2
ARPL 722	Practice Management	3	Spring 2
ARPL	Program Elective 4	3	Spring 2

ARPL	Program Elective 5	3	Spring 2
	TOTAL CREDITS	**60**	

Distribution of Coursework:	Credit Hours
Professional (Required Architecture Courses)	36
General (Free elective)	3
Optional (Architecture Program Electives)	21

Master of Architecture 1.5 - CUA Student with Advanced Standing

COURSE NO.	CLASS	Credit Hours	
ARPL601	Graduate Design Studio 1	6	Fall 1
ARPL636	Design Process and Methods	3	Fall 1
ARPL	Advanced Theory Elective	3	Fall 1
ARPL	Program Elective 1	3	Fall 1
ARPL603	Graduate Design Studio 2	6	Spring 1
ARPL696A,C	Thesis 1	3	Spring 1
ARPL742	Advanced Structures	3	Spring 1
ARPL722	Practice Management	3	Spring 1
ARPL696B,D	Thesis 2	6	Fall 2
ARPL	Program Elective 2	3	Fall 2
ARPL	Program Elective 3	3	Fall 2
500+ Elective	Free Elective	3	Fall 2
	TOTAL CREDITS	**45**	

Distribution of Coursework:	Credit Hours
Professional (Required Architecture Courses)	30
General (Free elective)	3
Optional (Architecture Program Electives)	12

NAAB

NAAB Degree Offered:	**Master in Architecture (M. Arch. 3)**
Prerequisite Degree:	Baccalaureate degree in any discipline other than Architecture
Total Number of Credits:	Master of Architecture (111 credit-hours)
List of Courses / Credit Hours:	See Below
List of Concentrations:	Sacred Space/Cultural Studies TMAIN (Technology and Media in Architecture and Interiors) Classical Architecture and Urbanism Urban Practice

Full-time status requires enrollment in 10 or more credit-hours per semester. Part-time status requires enrollment in 9 or less credit-hours per semester.

Master of Architecture 3

COURSE NO.	CLASS	Credit Hours	
ARPL500	Introduction to Design and Graphics	6	Summer 1
ARPL541	Structures 1	3	Summer 1
ARPL501	Architectural Design 1	6	Fall 1
ARPL783	Ethics + Stewardship	3	Fall 1
ARPL511	History of Architecture 1	3	Fall 1
ARPL633	Construction 1	3	Fall 1
ARPL641	Theory of the Orders	3	Fall 1
ARPL502	Architectural Design 2	6	Spring 1
ARPL542	Structures 2	3	Spring 1
ARPL512	History of Architecture 2	3	Spring 1
ARPL532	Environmental Design 1	3	Spring 1
ARPL634	Construction 2	3	Spring 1
ARPL601	Graduate Design Studio 1	6	Fall 2
ARPL731	Environmental Design 2	3	Fall 2
ARPL 611	History of Architecture 3	3	Fall 2
ARPL621	Digital Construction Documents: BIM	3	Fall 2
ARPL521	Predesign	3	Fall 2

Distribution of Coursework:		Credit Hours	
Professional (Required Architecture Courses)		99	
General (Free elective)		0	
Optional (Architecture Program Electives)		12	
ARPL602	Integrated Building Design Studio	6	Spring 2
ARPL632	IBDS Supplement	3	Spring 2
ARPL	Program Elective 1	3	Spring 2
ARPL 514	Introduction to Arch Theory	3	Spring 2
ARPL701	Graduate Design Studio 2	6	Fall 3
ARPL636	Design Process and Methods	3	Fall 3
ARPL	Program Elective 2	3	Fall 3
ARPL	Advanced Theory Elective	3	Fall 3
ARPL696A,C	Thesis Studio 1/Independent Thesis 1	3	Fall 3
ARPL696B,D	Thesis Studio 2/Independent Thesis 2	6	Spring 3
ARPL722	Practice Management	3	Spring 3
ARPL742	Advanced Structures	3	Spring 3
ARPL	Program Elective 3	3	Spring 3
	TOTAL CREDITS	**111**	

For a full list of courses using NAAB's template click on the links below:

M. Arch 2

M. Arch 3

4.2.6 Doctor of Architecture. The D. Arch. degree consists of a minimum of 210 credits, or the quarter-hour equivalent, of combined undergraduate and graduate coursework. The D. Arch. requires a minimum of 90 graduate-level semester credit hours, or the graduate-level 135 quarter-hour equivalent, in academic coursework in professional studies and optional studies. Programs must document, for both undergraduate and graduate degrees, the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

Program Response:

Not applicable.

4.3 Evaluation of Preparatory Education

The NAAB recognizes that students transferring to an undergraduate accredited program or entering a graduate accredited program come from different types of programs and have different needs, aptitudes, and knowledge bases. In this condition, a program must demonstrate that it utilizes a thorough and equitable process to evaluate incoming students and that it documents the accreditation criteria it expects students to have met in their education experiences in non-accredited programs.

4.3.1 A program must document its process for evaluating a student's prior academic coursework related to satisfying NAAB accreditation criteria when it admits a student to the professional degree program.

See also Condition 6.5

Program Response:
The procedures for evaluating student transfer credits and advanced placement in the B.S. Arch. and M. Arch. programs are as follows:

Bachelor of Science in Architecture
Catholic University accepts applications for transfer students for admission either in the fall or spring semester. The link to the process through the University is here: https://www.catholic.edu/admission/undergraduate/transfer-students/transfer-application-information.html, and the architecture specific information here: https://architecture.catholic.edu/admission/undergraduate/index.html

a. Final terms of admission are conditioned by the following:
b. Credits must represent work that is applicable to a current curriculum in the university;
c. Credits must represent work that is substantially equivalent in quality and quantity to the work pursued here for which it is to be substituted;
d. Only courses passed with a grade of at least C (when D is passing) will be considered;
e. Of the last 36 to 40 semester hours of credit earned for the degree, 30 semester hours must be earned at CUA. For those entering at the sophomore or junior class level, distribution requirements may be modified.

On the recommendation of the dean, credit for educational experiences in programs of the armed services will be accepted for transfer after completion of at least one semester of full-time study in a degree program at CUA and for such courses as substitutes for courses required in the degree program.

Transfer Students
The School of Architecture and Planning accepts transfer students at all levels of the B.S. Arch. Program, depending on the availability of studio space. Transfer students can be accepted for both the first and second semesters. Transfer students who have experience in architectural design will receive studio assignments based on a review of their portfolios. Portfolios are required as part of the application process for these students. Link to the documentation outline for portfolio submission: https://architecture.catholic.edu/_media/docs/2020-10-17transferstudentportfoliorequirements.pdf Undergraduate transfer applicants should have a minimum cumulative grade point average of 2.80.

Transfer Students Holding an Associate Degree in Architecture
Students who hold an associate degree in architectural science or an equivalent degree from a two-year community college may be eligible for the program leading to the degree Bachelor of Science in Architecture. Students are admitted to this program only in the fall. A minimum grade point average of 2.80 is required for admission. Students are admitted with junior status. Upon admission the student's portfolio and coursework is evaluated by the Associate Dean for

Undergraduate Studies to determine proper placement in the program. Students who place out of any required course in the program must take elective courses to fulfill the credit requirements.

Transfer of Credit

To receive transfer credit for a course taken elsewhere, the student must submit an official transcript of transfer courses. All course work completed at colleges and universities within the United States and internationally are evaluated on a case-by-case basis by the Transfer Credit Office. To receive transfer of credit, the student must adhere to the following procedure: (a) student submits syllabi to the Transfer Credit Office to determine whether the courses to be transferred are appropriate for the student's degree program, (b) present official transcript and descriptive materials for the course, including syllabus, textbooks, and the student's own work products. If accepted as transfer credit, the Transfer Credit Coordinator completes a transfer credit evaluation worksheet and sends it to The School of Architecture and Planning Associate Dean for Undergraduate Studies for review and communicates to the student and then submits the necessary documentation to the Office of the Registrar.

Master of Architecture Program

The transfer of 6 credit-hours of graduate work earned at another accredited institution, within the last 10 years, in which a student received grades of B or above may be applied toward course requirements for the M. Arch. degree upon recommendation of the appropriate department and with the approval of the academic dean.

To receive transfer credit for a course taken elsewhere, the student must submit an official transcript of transfer courses. All course work completed at colleges and universities within the United States and internationally are evaluated on a case-by-case basis by the Associate Dean for Graduate Studies. To receive transfer of credit, the student must adhere to the following procedure: (a) confer with the Associate Dean for Graduate Studies to determine whether the courses to be transferred are appropriate for the student's degree program, (b) present official transcript and descriptive materials for the course, including syllabus, textbooks, and the student's own work products. If accepted as transfer credit, the Associate Dean for Graduate Studies then submits the necessary documentation to Enrollment Services.

Waiver from Professional Degree Requirements:

All incoming students in the M. Arch. 2 and M. Arch. 3 tracks are required to meet with the Associate Dean for Graduate Studies to determine their placement within the program. Students who have taken pre-professional or professional courses at another institution that satisfy requirements for the Master of Architecture, may request to be waived from repeating the material at CUA. The procedure for requesting a waiver is the same as for the transfer of credits listed above.

If the coursework under review satisfied credit hours and requirements toward their previous degree, any waivers do not reduce the student's course of study below CUA's minimum credit hours for the degree. In this case, students must enroll in elective courses to satisfy the minimum degree requirements.

If a student is requesting a waiver based on transferred credits that did not count toward their previous degree, the minimum resident credit hours for the degree are reduced based on the transfer of credit that has been approved.

Advanced Standing

At the time of application to the M. Arch. program, applicants are considered for advanced standing. Decisions regarding advanced standing are made based on the following criteria: (a) portfolio and personal statement and (b) undergraduate GPA. Students awarded Advanced Standing must meet with the Associate Dean for Graduate Studies to develop their program of studies. Students with Advanced Standing must complete 45 semester credit hours in design,

history/theory, technology, planning and professional practice. Students who receive advanced standing are not waived out of any courses that satisfy the Student Performance Criteria. Applicants with a B.S. Arch. from The Catholic University of America are offered advanced standing based on the following criteria: (a) GPA of 3.0 or higher, (b) upon the recommendation of faculty.

4.3.2 In the event a program relies on the preparatory education experience to ensure that admitted students have met certain accreditation criteria, the program must demonstrate it has established standards for ensuring these accreditation criteria are met and for determining whether any gaps exist**.**

Program Response:
See 4.3.1

4.3.3 A program must demonstrate that it has clearly articulated the evaluation of baccalaureate-degree or associate-degree content in the admissions process, and that a candidate understands the evaluation process and its implications for the length of a professional degree program before accepting an offer of admission.

Program Response:

The University Office of Graduate Admissions provides detailed information on the admissions process (https://www.catholic.edu/admission/index.html). In addition, the School of Architecture and Planning website (https://architecture.catholic.edu/admission/graduate-programs/index.html) makes available a comprehensive listing of requirements for the submission of transcripts, letters of recommendation and the architectural portfolio. Students work directly with the college's student advisor and the Office of Admissions who manage the admissions process and communicate the student's individual program of study.

5—Resources

5.1 Structure and Governance

The program must describe the administrative and governance processes that provide for organizational continuity, clarity, and fairness and allow for improvement and change.

5.1.1 Administrative Structure: Describe the administrative structure and identify key personnel in the program and school, college, and institution.

Program Response:

The organization of the University and the policies and procedures governing its operation are defined in the Faculty Handbook:

Part I, The Organization of the University; Bylaws, Current Governing Documents; and Historical Documents;
Part II, Appointments and Promotions;
Part III, Policies, Procedures, and Services; and
Part IV, Canonical Statues of the Ecclesiastical Faculties.

University Leadership

The University is led by Peter Kilpatrick, the 16th President. The University is a nonprofit corporation whose members are the Fellows of the University. Responsibility for governance resides in the first instance in the Board of Trustees.

The provost and chief academic officer of the University is Dr. Aaron Dominguez. The 12 schools of the University are led by their respective deans. The University is also governed by the Academic Senate.

The senior administrators lead administrative departments. The Administrative Council serves as a sounding board for the president on non-academic policy and procedures; the Executive Committee of the Administrative Council provides regular advice directly to senior leadership.

Theological College, a seminary affiliated with Catholic University, is led by its rector.

Board of Trustees

The University's governance structure is intended to perfect and make permanent the University's essential character as a Catholic and American institution of higher learning and its role as the national university of the Catholic Church, sponsored by the United States bishops, while permitting lay responsibility and support for the University. The Fellows serve as the members of the Board of Trustees and hold certain reserved powers designed to preserve the ecclesial patrimony of the University. The responsibility for governance and oversight of the operations of the University resides in the University's Board of Trustees.

The Fellows include trustees from four groups: Cardinal fellows, which includes all cardinals serving as diocesan bishops in the United States; four bishop fellows (diocesan bishops appointed by the Fellows); ex officio fellows, who include the chairman of the Board; the president of the University; the chancellor of the University; the president of the United States Conference of Catholic Bishops; and appointed fellows (two laypersons) from the Board of Trustees. The University will have no fewer than twenty (20) and no more than forty (40) trustees who are designated as the appointed trustees.

Senior Administrators

The University's administrative offices are essential to supporting the operations and mission of the university. They deal with a diverse range of issues including advancement, student affairs, enrollment management and marketing, finance, general counsel, compliance, public safety, and campus ministry.

Provost, Aaron Dominguez, Ph.D.
Executive Vice President, Robert M. Specter, M.S., M.B.A.
Chief Operating Officer, Robert M. Specter, M.S., M.B.A.
University Treasurer, Robert M. Specter, M.S., M.B.A.
Vice President for Student Affairs, Judi Biggs Garbuio, Ph.D.
General Counsel, Matthew C. Dolan
Vice President for University Communications, Karna Lozoya
Interim Vice President for Enrollment Management, Hasanna Tyus
Chief of Staff and Counselor to the President, Lawrence J. Morris
Vice President for University Advancement, Scott P. Rembold, M.A.

Staff Leadership Council

The Staff Leadership Council advises the President and the senior leadership of the University on matters that are recommended by the Council or requested by the President or administration. The council works collaboratively with University Staff and the University's leadership to identify, track, and record the ways, means, and plans to accomplish the University's stated strategic ends.

Council Members, 2021/2022

Senior Financial Analyst, Angela Cooper, Staff Leadership Council Secretary
OFM, University Chaplain, Fr. Aquinas Guilbeau
Associate VP, Advancement, Josephine Everly,
Coordinator of Graduate Academic Services, Terrie Gomillion-McPherson
Executive Director of Strategic Information Management, Michael Graham-Cornell
Associate VP of Student Engagement, Student Affairs, Kathryn Jennings
AVP Public Safety/Emergency Management*, Kirk McLean
Senior AVP for Administration*, Matt McNally
Senior Talent Specialist, Office of Human Resources, Neha Pearson
Senior Associate Director, Office of Student Financial Assistance, Tatjana Reese
Associate VP and Director of Athletics, Student Affairs, Sean Sullivan
Associate VP for Enrollment Management, Hasanna Tyus
Director of Web Strategy, University Communications, David Williams
Special Assistant to the President*, Mel Williams
Director of Creative Services, University Communications, Ellen Woods
Manager, Desktop Engineering, Information Technology, Ben Yuly, Staff Leadership Council Chair

Academic Senate

The Academic Senate shares with the president "the immediate responsibility for academic governing of the University by establishing, maintaining, supervising, and in general being responsible for the academic policies of the University" (Bylaws II, 6). The Academic Senate is composed of the president, the provost, the deans of the various schools, various administrative officials of the University, representatives of graduate and undergraduate students, and delegates elected by the faculties of the various schools of the University. The Constitution of the Academic Senate is the basic governing document of the senate, and detailed provisions reflecting the

composition, the election, the authority, and the procedures of the Academic Senate appear in the Faculty Handbook.

These Academic Senate webpages show the current membership of the senate and its various components including major committees elected by the senate (Executive Committee, Committee on Committees and Rules, and Committee on Appointments and Promotions), standing and adjudicatory committees appointed by the Senate's Committee on Committees and Rules, and the Undergraduate and Graduate Boards. A brief description of the areas of responsibility of each group and its membership for the academic year is also given.

Office of the Provost

Provost, Aaron Dominguez, Ph.D.
Senior Vice Provost for Academic Administration, J. Steven Brown, Ph.D.
Dean of Graduate Studies, J. Steven Brown, Ph.D.
Dean of Undergraduate Studies, Lynn Mayer, Ph.D.
Vice Provost for Teaching, Lynn Mayer, Ph.D.
Vice Provost for Global Strategies, Duilia F. de Mello, Ph.D.
Vice Provost for Sponsored Research, Research Compliance, and Technology Transfer, Ralph Albano, M.Eng. M.B.A.
Vice Provost for Academic Operations and Strategic Planning, David P. Long, S.T.L., M.Phil., J.C.D.

Organizational Chart

School of Architecture and Planning

The School of Architecture and Planning is led by the Dean. The Dean reports directly to the Provost. The Dean meets with the Provost and the Dean's Council (chaired by the Provost) on a monthly basis during the academic year and as-needed during the summer.

The Dean is supported by the Associate Dean of Undergraduate Studies and the Associate Dean of Graduate Studies. These positions are appointed by the Dean. Together, they form an Executive Committee, with the Dean serving as Chair.

The Executive Committee is advised by the Faculty Advisory Committee (FAC), a committee composed of all full-time tenured, tenure-track, of-practice, and visiting professors. The Dean appoints the Chair of the FAC.

Ad Hoc Committees are convened by the Dean on an as-needed basis (see 5.1.2)

The Faculty, Lecturers, and Students are supported by a School's Staff, including an Administrative Assistant, Administrative Coordinator and Assistant to the Dean, a Student Engagement Coordinator, Facilities Director/Woodshop Manager, and an Advancement Officer. The Staff reports to the Executive Committee.

Office of the Dean

Dean and Chair of the Executive Committee, Mark Ferguson
Associate Dean of Undergraduate Studies, Ana Roman Andrino
Associate Dean of Graduate Studies, Tonya Ohnstad
Chair of the Faculty Advisory Committee, James McCrery
Administrative Assistant, Christian Morales
Administrative Coordinator and Assistant to the Dean, Paula Riff
Student Experience Coordinator, Cate Sullivan

Facilities Director and Shop Manager, Lorenzo DeAlmeida
Senior Director of Advancement, Christine Klecic

5.1.2 Governance: Describe the role of faculty, staff, and students in both program and institutional governance structures and how these structures relate to the governance structures of the academic unit and the institution.

Program Response:

The Dean is responsible for leading, managing, and advocating for the program. The Dean's duties include, but are not limited to, setting forth the school's mission; recruiting, hiring, supporting, and managing the Faculty, Lecturers, and Staff; admitting graduate students; overseeing student advancement from admission through graduation; maintaining the facilities; and maintaining relationships with external organizations, donors, and alumni.

The Associate Deans are responsible for supporting the Dean, Faculty, Lecturers, and Students in the day-to-day operation of the program, including, but not limited to, recruiting undergraduate students in collaboration with the Dean of Undergraduate Admissions, recruiting graduate students in partnership with the Dean of Graduate Admissions; advising students from admission through graduation; recruiting, hiring, and onboarding Lecturers; rostering Faculty and Lecturers; rooming classes; coordinating and advising extracurricular events; and liaising with the Office of the Provost, Division of Student Affairs, and other University administrators. The Executive Committee meets weekly for 60 minutes. The Staff and Executive Committee meet weekly for 30 minutes. The Dean chairs the meetings.

The Faculty Advisory Committee (FAC) is responsible for maintaining and developing the program by promoting collegiality and mission alignment within the Faculty; overseeing, assessing, and improving the curriculum; developing and implementing policies; providing administrative support to the Executive Committee; reviewing Faculty and Lecturer hiring recommendations put forth by the Executive Committee; and student advising. The FAC meets twice a month for 45 minutes during the academic year and once a year with all Lecturers present to assess the program in a one-day retreat setting. The FAC, Lecturers, and Staff meet twice a month for 45 minutes. The Dean chairs the meetings.

As expected, there are various levels within the faculty that follow national norms. Faculty can hold full-time tenured or tenure-track appointments (as Assistant Professor, Associate Professor or Ordinary Professor–CUA's equivalent of Full Professor), full-time 'Clinical' appointments (with negotiated duties and length of service), full-time but short-term appointments as "Visiting' faculty, and part-time Adjunct appointments, typically made for th semester.

As part of their duties, faculty are appointed service responsibilities to administer extracurricular functions of the program (Faculty Service Directory). The Dean convenes ad hoc committees and appoints chairs on an as-needed basis, e.g. the Faculty Search Committee, Failing Grade Appeal Committee, Graduate Admissions Committee, etc.

The School holds regular, 30 minute, all-hands, Town Halls, four times per semester to present new information, announce upcoming events, and solicit comments and questions from attendees. The Town Halls are chaired by the Associate Deans.

The School supports student organizations. The leaders of the American Institute of Architecture Students (AIAS) and of the emerging chapter of the National Organization of Minority Architects (NOMA) are in frequent contact with the Dean.

The AIAS is an independent, non-profit, student-run organization that brings the School community together. It supports students in their academic and professional aspirations by

providing unique learning experiences, creating access to employment opportunities, and aiding in their studies. These events and services include an annual Career Fair, Mentoring, Dine, 'n Design student led design critiques, Student Store, Resume and Portfolio Workshops, University-Wide Book Fair, Beaux Arts Ball, and regularly catered all-school Lunches.

The University student body is represented by the Student Government Association (SGA). It is organized in three branches.

The Executive Branch
The SGA Executive consists of the President, Vice President, Treasurer, and Secretary. In addition to the board is the Executive Cabinet consisting of the Executive Initiative Directors and the Director of SGA Express. The Executive elections take place each spring and Director positions are appointed by the President. Each member of the cabinet serves the President in a specific area of interest which is important to the mission of SGA. The cabinet works on projects for both executive initiatives as well as in support of legislative work in the Senate.

The Legislative Branch
The Senate is comprised of twenty-six Senators with two Senators from each class and two Senators from each academic school who are elected in October and serve for the remainder of the academic year. SGA Vice President Gemma del Carmen serves as the presiding officer of all Senate sessions. There are currently five standing committees in the Senate: Rules and Administration, Academic Affairs, University Services, Student Resources, and Campus Life. Each committee is responsible for a particular area of expertise. Committee chairs are elected by the Senate body at the first session.

The Treasury Board
The SGA Treasury Board is made up of eight voting members across all classes at the Catholic University of America. This group of directors is led by the Treasurer, who votes only in cases of a tie. The Treasury Board is responsible for allocating funds out of the student activity fee to all student organizations for operations, programming events, other related costs.

5.2 Planning and Assessment

The program must demonstrate that it has a planning process for continuous improvement that identifies:

5.2.1 The program's multiyear strategic objectives, including the requirement to meet the NAAB Conditions, as part of the larger institutional strategic planning and assessment efforts.

Program Response:

Multiyear Strategic Objectives
In that the school has undergone a changeover in administration since the last visit, and since that change was effective only two years ago, there is an understandable transition underway as regards how our strategic objectives are framed. Nonetheless, there has also been substantive continuity. For example, the school is still following the longstanding, previously articulated strategic plan. Also, the school's Mission remains unchanged. Priorities beyond the school's control (such as the transition to all online modalities) have been given greatest immediate attention. Further, the communication from NAAB advancing the visit by one year also needed immediate attention.

Current emphases are:

1) Recruit and retain Faculty and Staff to advance the mission through excellent teaching, research, and service

2) Elevate the School's reputation and increase the employment opportunities for its students across the nation

3) Increase enrollment

4) Increase alumni and philanthropic support

5) Increase and intensify the School's relationships with other institutions

6) Meet all NAAB Conditions

Mission

The School of Architecture and Planning at The Catholic University of America is dedicated to the professional education of those who will plan, design, build, and conserve the built environment. Our principles are critically informed by our relationships with others (Social dimension), our relationship with the environment (Stewardship dimension), and our relationship with God (Sacred dimension). We are committed to preserve, reclaim, innovate, and pass on the knowledge, modes of thinking, and skills that empower architects to design buildings that fit together into safe, just, and uplifting communities.

We advance the mission in the following ways:

1) Maintain a workplace that promotes the development of Faculty and Staff careers. Recognize achievement, provide resources, and share responsibility for the program and each individual member's personal development.

2) Maintain a workplace that promotes holistic student growth--intellectual, emotional, moral, and spiritual. Prepare students to become good neighbors, engaged citizens, and community stewards.

3) Advance the understanding of the architect's role in society today and throughout history.

4) Advance the understanding of the architect's role in urban design. Teach architectural design through the lens of urbanism. Teach place-making. Encourage cooperation among architects, past and present, to work toward the common good. Encourage stewardship of the public realm and the responsible use of natural resources.

5) Advance a historical understanding of global architecture. Teach the long view of architecture in society. Teach how new buildings are made from existing buildings. Teach literacy in multiple architectural languages. Encourage reflection and discussion on the application of experience to the needs of today, thus transmitting a vital and relevant architectural culture. Distinguish between the perennial and temporal conditions of the human experience and between the universal and particular manifestations of human culture. Cultivate good judgment in responding to these conditions.

6) Invite and discuss difficult questions that support a lifetime of learning. Cultivate self-awareness, curiosity, and a holistic view of the world.

5.2.2 Key performance indicators used by the unit and the institution

Program Response:
The School monitors the ARE pass rate on a quarterly basis, reviews student evaluations at the end of each semester, and consults the following statistical data at the beginning of each semester.

Statistical Profiles
The Statistical Profiles are updated annually and present current and historical information about students, faculty, staff, academic programs, academic support, physical plant, tuition, financial aid and university finances. Data included in the Statistical Profiles support university-wide planning efforts as well as provide individual academic units with planning and management information.

Course Evaluations
At the end of every semester, students are invited to provide feedback on courses, classrooms and instructors through online questionnaires. In addition to soliciting responses to set questions, the questionnaires also allow for open-ended observations about perceived strengths of the course and instructor, suggestions for possible improvements, and any other comments the student might wish to make about the course. Course evaluations from Spring 2003 to Fall 2012 can be found on the old website. Course evaluations from Summer 2014 to current can be found on the new website.

Dashboards
Discover new trends and insights from University data using self-service interactive dashboards. These data visualizations provide on the fly capabilities to summarize, compare, filter, and drill down into the data. Analyze data about admissions, enrollment, retention, and more. University log-in required.

Common Data Set
The Common Data Set (CDS) is a collaborative effort between publishers and the higher education community to improve the quality and consistency of information reported in college guide books. The CDS consists of a series of standard data items and definitions that are compiled annually by all participating institutions. Participating publishers include: The College Board, Peterson's, and U.S. News and World Report.

Surveys
The Office of Financial Planning, Institutional Research and Assessment annually conducts a number of surveys to assess the educational experiences and outcomes of students. These surveys include: The Undergraduate and Graduate Alumni Surveys, and the Classroom Survey of Student Engagement.

Outcomes
We participate in several national surveys of student engagement and subscribe to databases that provide information on alumni outcomes. For links to The National Survey of Student Engagement, The CIRP Freshman Survey, National Student Clearinghouse data, and Emsi Alumni Insight, follow this link.

Assessment
As a result of two closely-related initiatives – major assessment findings reports and annual key assessment findings documents - departments/Schools document on a set schedule (every five years and annually) that they have reviewed specific quantitative and qualitative data and, then, reflected and commented on the assessment findings and implications for their programs.

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School Performance Indicators

External Critic/Juror Feedback

The local architectural professional community is large, active, and engaged in continuing education. Each Design Studio instructor regularly recruits two or more professionals to serve as jurors at mid-term and final reviews. The conversation between instructor and guest critics provides a direct evaluation of each student's performance and an indirect evaluation of the course. Instructors customarily discuss the evaluation with jurors in a post-review conversation and share comments with colleagues. They incorporate feedback into the design of subsequent courses.

Board of Visitors Feedback

The Board of Visitors is composed of alumni who are practicing professionals in architecture and related fields. There are currently 9 members. Our goal is to convene 18 members over the next three years. The Board meets three times a year to receive and respond to the Dean's report on the state of the school, the Dean's goals, the current student work, and to offer suggestions for strengthening the program. Its current priority is to build the number of Board members, to increase engagement with alumni, and to support the Dean's curricular goals. Board members also teach, serve on Design Studio juries, and support faculty development

Course Assessments

Instructors receive and review student evaluations at the end of each semester. Instructors meet with the Associate Deans and Dean to discuss areas for improvement and minor curricular revisions. Significant curricular revisions are reviewed with the Faculty Advisory Committee.

The School has initiated a process and appointed faculty members to lead the faculty on a comprehensive curriculum review over the academic year 2022/2023. The curriculum will be reviewed and assessed horizontally at all six levels of study and vertically in the major subject areas–design, history/theory, technology (construction, environmental design, and structural design), professional practice, and thesis.

Architecture Registration Examination

The School reviews the ARE pass rate on a quarterly basis with particular attention to the IPAL students.

5.2.3 How well the program is progressing toward its mission and stated multiyear objectives.

Program Response:

Progress Toward Mission
Progress on a wide number of fronts has been considerable, and much can already be reported as regards the objectives stated above.

1) Maintain a workplace that promotes the development of Faculty and Staff careers
   a. Recruit and hire four tenure-track faculty members (in-progress)
   b. Recruit and hire approximately 15 Lecturers per semester (recurring)
   c. Compensate Faculty members, Lecturers, and Staff at competitive rates (in progress)
   d. Develop a recurring Summer Semester in London (in progress)
   e. Develop a recurring Fall Semester in Rome (in progress)
   f. Develop a Distinguished Visiting Critic program for each concentration using the model of the Walton Critic in Sacred and Cultural Studies (in progress)

g. Recruit and hire a Student Engagement Coordinator (in progress)
h. Develop and adopt Faculty Workload Guidelines (in progress)
i. Develop and adopt Faculty Promotion and Tenure Guidelines (in progress)
j. Develop regular course and program assessment procedures (in progress)
k. Convene a Comprehensive Curriculum Review Committee (in progress)
l. Develop a public relations capability within the school

2) Maintain a workplace that promotes holistic Student growth
   a. Maintain collaboration and leadership through studio culture, extra-curricular activities, engagement with the university community, and engagement with the city community, e.g. AIAS, Career Fair, Research Day, and the Notre Dame de Paris Truss
   b. Maintain reasonable workloads guided by the university standard of 15 credit hours per semester which includes 15 hours of instructor contact plus 30 hours of out-of-class work)
   c. Maintain access to school facilities, staff, faculty, and other university resources cited elsewhere in this report
   d. Maintain access to generous course advising, frequent performance assessments, and timely remedial assistance necessary for academic success
   e. Maintain multiple and diverse opportunities to be recognized for individual achievement and contributions to the school, e.g. numerous awards, AIAS membership, NOMA chapter formation, Research Day participation, Interschool Design Competition, Student Ambassador participation, and Tau Delta Sigma honor society membership
   f. Offer financial support through scholarships and a printing allowance
   g. Make capital improvements to the Crough Center to augment transparency, accessibility, and a healthy environment (in progress)
3) Advance the understanding of an architect's role in society today and throughout history
   a. Maintain instruction in the history of notable patrons and architects
   b. Maintain instruction in the visual representation of information through drawing and modeling with both manual and digital tools
   c. Maintain instruction in multiple design methodologies and the multiple languages of architecture
   d. Maintain instruction in the ethical practice of architecture
   e. Maintain instruction in the principles of statics, structural materials, and building assemblies
   f. Maintain instruction in passive and mechanical environmental design principles, strategies, and systems
   g. Maintain instruction in construction materials and assemblies
4) Advance the understanding of the architect's role in urban design
   a. Maintain and expand the graduate curriculum in the Urban Practice concentration and weave it into the required undergraduate curriculum
   b. Maintain instruction in the role of architects in the life of cities
   c. Maintain instruction in building ensembles designed by multiple architects over long periods of time
5) Advance a historical understanding of architecture around the globe
   a. Maintain and expand instruction in historical surveys of notable buildings, theories, and treatises from around the globe–encourage the study of the migration of ideas
   b. Maintain and expand instruction in the application of lessons from history to present day building programs, materials, assemblies, and systems
6) Invite and discuss difficult questions that support a lifetime of learning
   a. Maintain and expand instruction in Thesis I (Research) and Thesis II (Design) through individual advising by concentration directors and external experts
   b. Facilitate faculty research that advances discussions about subjects that distinguish the program, in particular, the similarities and differences in classical and contemporary approaches to architectural design

<u>Progress Toward Multiyear Objectives</u>

Upon arriving on July 1, 2020, the new dean set out to study the operation and goals of the program through discussions with Faculty, Lecturers, Staff, Alumni, and Benefactors, as well as peers at other schools of architecture. His immediate objective was to create stability, continuity, and goodwill for the new administration while learning how to operate the School and advance its mission.

In July 2020, the pandemic was six months old and the University was preparing to enroll and instruct students remotely during the 2020/2021 academic year. The Dean's highest priority was to adapt on-line pedagogies hastily developed mid-semester in spring 2020 into a reasonable facsimile of an in-person college experience. Steps were taken to simplify and strengthen the on-line/hybrid school environment. This included training on selected software, equipment upgrades, and a heightened sensitivity to the practical, intellectual, and emotional challenges faced by students and instructors working in a virtual environment while living under pandemic conditions.

In his first weeks, the Dean re-organized the Faculty and Staff in the Dean's office; brought the Faculty, Lecturers, and Staff together in more frequent coordination meetings; formed the Faculty Advisory Committee (FAC); reinvigorated Faculty service appointments; recruited and hired new Lecturers; began preparations for a mock accreditation; laid plans to convene a strategic planning committee; and affirmed the need for a comprehensive curriculum review. New administrative job descriptions, Staff promotions, and reformed procedures managed by the Dean made an effective administrative body.

In the fall of 2021 Faculty and Students returned to the Crough Center. As the semester progressed, faculty became increasingly aware of the difficulties students experienced while living in a campus environment away from home, re-learning age-appropriate social skills, and working with others while observing masking and social distancing rules. Experience with on-line instruction enabled remote work by instructors and students unable to be physically present, thus bringing all members of the school community together. It also enabled students to live and work in the Rome Center, Italy, while attending classes in the Crough Center.

In September 2020, the new dean charged the Faculty with producing a mock accreditation. This was to serve as a first step in the preparation for the 2023 NAAB Visiting Team, as well as a way for the Dean to become intimately familiar with the program. The faculty convened multiple times in the fall to affirm the school's mission and curricular goals, to assign NAAB criteria to courses, to assess course syllabi, and to select and assess representative student design projects. Two review sessions were held in spring 2021 with an external former architecture school dean who provided commentary on the program's strengths and weaknesses. The first session focused on the mission, curricular goals, and unique identity of the school. The second session focused on the faculty's course assessments. The weaknesses were noted and recommendations for course improvements offered in these sessions were folded into future course offerings.

The mock accreditation was immediately followed by the appointment of a Faculty and Staff APR writing team, the development of a work plan, the selection of assessment points, and the alignment of course offerings with NAAB criteria. This work was substantially accomplished before the beginning of classes in the fall 2021. During the fall semester, weekly Faculty roundtable discussions were convened to develop a common understanding of the NAAB Shared Values, Program Criteria, and Student Criteria. The selection of assessment points was refined, assessment rubrics and procedures were coordinated, and procedures were instituted for collecting and archiving evidence. Regular course assessments began at the conclusion of the spring 2022 semester. At the commencement of the fall 2022 semester, the faculty and lecturers assembled in a roundtable meeting to present all fall courses to the assembled group. This was the next step in a program of systematic course assessments by level–freshman to graduate–and by major subject area–design, history, technology, professional practice, and thesis.

Over the past four semesters, the Dean and Faculty Advisory Committee (FAC) have worked toward the program's multiyear objectives as follows:

1) Recruit and retain Faculty and Staff to advance the mission through excellent teaching, research, and service
    a. Initiated a search for tenure-track faculty and appointed two new tenure-track faculty members (both leaving tenured positions) and appointed one of-practice faculty member to a tenure-track
    b. Increased the pool of qualified part-time design instructors
    c. Promoted retention of Faculty and Staff by establishing an annual allowance of up to $2,000/person for career development, using funds donated by the Board of Visitors
    d. Developed a fund to provide faculty stipends for peer-reviewed research focused on enriching the dialogue between classical and modern approaches to design
2) Elevate the School's reputation and increase employment opportunities for its students across the nation
    a. Addressed deficiencies cited in the NAAB Interim Report by distributing instruction in building codes, zoning regulations, and cost estimating across multiple courses, including Pre-Design 521, Design Studio 302, Integrated Building Design Studio Supplement 432, and Integrated Building Design Studio 402
    b. Increased the pass rate of IPAL students taking the ARE by making study materials offered by leading online exam preparation organizations available to students at no charge
    c. Increased the ability of IPAL students to remain with their cohort as they move through the program
    d. Enhanced the ability and confidence of students to draw manually–quickly and on-the-fly– to facilitate close observation, analysis, design, and communication, by developing and offering an additional elective drawing course.
    e. Reinforced studio culture--a distinguishing feature of architectural practice in the academy and the profession. Encouraged emotional and intellectual growth, social skills, collaboration, and peer-to-peer learning, through structured opportunities for public gatherings and in peer-to-peer learning in studio reviews in which upper level students serve as critics for lower level students.
    f. Promoted greater appreciation for the manual arts by reestablishing the Design/Build Studio in the fall semester with the Shop Manager as a co-instructor
    g. Brought greater consistency and equal access to fundamental design instruction at each Design Studio level by encouraging Design Studio Coordinators to establish common learning objectives and rubrics for all sections at each level
    h. Focused the core curriculum on the Master of Architecture degree by sunsetting all but one non-professional degree. These degree paths had very low enrollment and no instructors.
    i. Ensured that graduates of the Master of Science in Net Zero Design degree would acquire the ability to incorporate sustainable design practices into new building designs by establishing the Master of Architecture degree as a prerequisite.
    j. Took steps to reestablish urban design courses based on the history of cities, the close analysis of existing cities, and strategies for more sustainable living.
    k. Prepared students to design neighborhoods by emphasizing the urban context in Design Studio courses and cultivating the ability to use individual buildings, regardless of their aesthetic, as building blocks for neighborhoods, towns, and cities. Prepared students to integrate new buildings with existing buildings and to design public places which become the framework for other new buildings.
    l. Took steps to restore a small library of periodicals and common reference books in the Crough Center in a lounge setting to encourage learning through browsing of print material and the integration of acquired knowledge through design

3) Increase enrollment
    a. Assisted the Dean of Undergraduate Admissions and collaborated with the new Dean of Graduate Admissions to improve recruiting procedures and recruit students
    b. Initiated public relations activities to promote the school, its mission, its achievements, and elevate its presence in print and digital publications
    c. Supported faculty research leading to publications, papers, lectures and other public facing activities
    d. Took steps to form a student led publication for internal and external consumption
    e. Took steps to improve the structure and content of the school website, the primary source of information for potential students
    f. Began the regular publication of a digital newsletter, three times a year
    g. Took steps to consolidate the social media posts under the direction of the Advancement Officer
    h. Took steps to advertise and broadcast school lectures to alumni, hence bringing them closer to the School community and encouraging them to become ambassadors of the School
    i. Took steps to explore partnerships with the National Building Museum to bring national attention to the School
    j. Produced exhibits in collaboration with Handshouse Studio. Fabricated a new timber truss for Notre Dame de Paris. This has attracted international attention
    k. Encouraged and supported students to compete for awards, bringing them to the attention of students and educators at other universities
    l. Encouraged donors to support scholarships to make an architectural education accessible to more qualified students
    m. Maintained our high school summer program, Experiences in Architecture, and enrolled a record number of students in the 2022 program. Most attended in person.
4) Increase alumni and philanthropic support
    a. Recruited an experienced Advancement Officer to engage alumni and donors
    b. Revived and grew the Board of Visitors to help engage alumni and increase philanthropic support
    c. Sought philanthropic support from sources that support the School's mission
5) Increase and intensify the School's relationships with other institutions
    a. Revived the Foreign Studies program after a period of hibernation caused by a lack of resources and the pandemic. The school is rebuilding its program at the Rome Center where courses will be offered in the fall semester to senior undergraduate students and first year graduate students. The curriculum will focus on history, drawing, and classical architectural design.
    b. Developed a summer semester in London. Collaborated with instructors at the University of Cairo in an urban design studio.
    c. Took steps to be more engaged with the abundant cultural, institutional, and professional resources in Washington DC, exemplified by a recent exhibit of student work at the National Building Museum and the frequent use of local building sites for Design Studio assignments.

5.2.4 Strengths, challenges, and opportunities faced by the program as it strives to continuously improve learning outcomes and opportunities.

Program Response:

Strengths

As one of eleven Schools at the Catholic University of America, the School of Architecture and Planning draws inspiration and foundational principles from the ethical, moral and social doctrines of the Catholic Church. Catholic doctrine is ever ancient and ever new–the immutable truths of the human condition's relation to the original Creator/Designer being better and better understood

with each generation. This provides our students with knowledge of the importance of both rootedness and curiosity in design.

The School draws strength from the accumulated achievements of its faculty and graduates, beginning with its founding as a department in 1911 by Frederick Murphy, the architect of the Mullen Library and other significant buildings on campus, its elevation to a school in 1992 in the newly renovated Crough Center under the deanship of Stanley Hallet, and its growth in enrollment and expansion of course offerings under the deanship of Randall Ott. Its diverse and deeply committed faculty, as well as its large pool of local practitioners willing and able to teach, are admired and respected by the students.

The Catholic intellectual tradition prepares architects to welcome people from all walks of life, to be community stewards in service of the common good. They do this by enhancing the public realm with each new building design. It is an expansive view of the architect's value to society. The Catholic tradition also teaches that architects have an obligation to take care of the earth's resources, just as one takes care of one's home. It invites architects to learn from enduring places where people find safety, justice, and a sense of belonging, and to apply these lessons to current day conditions and opportunities. These goals are an expression of love for humankind and the focus of an architect's unique value to society.

The school enjoys a reputation in the region as a source of graduates well-formed in character and well-trained in professional skills. The reputation is built on a holistic education including freshman studies in the liberal arts, emphasizing rhetoric, literature, philosophy, and theology. The School's embrace of both classical and modern paradigms in the design studio sequence and its graduate concentrations in sacred and cultural space, classical architecture, urban design, sustainable design, and media technology define the School's unique character.

Its association with eleven other schools in a research university, including the professional schools of Engineering, Business, Social Services, Law, Nursing, Music, Drama and Art are opportunities for cross-pollination in both curricular and extracurricular activities. The opportunities for interdisciplinary study are ripe for development under the leadership of the new University President. The University has a relatively large cohort of students enrolled in a five year dual degree architecture and engineering program. The School also hosts a Sustainability Minor offered to students in other schools.

The University's location in Washington DC–the nation's capital–is a cultural, architectural, and institutional resource. The city offers future architects the essential experience of everyday life in a city. The diversity of exemplary buildings and building ensembles; the accessibility of an exemplary public realm composed of streets, squares, parks and civic monuments; the opportunities for interventions in the urban fabric; the activities of local, national and international civic institutions; the vibrant community of professional architects; and the national headquarters of the AIA, the ACSA, and other professional organizations are key resources for an architect's training.

The School's offices, classrooms, studios, workshops, and galleries are consolidated under one roof. This is both convenient and a source of community cohesion. Our unconventional building remains one of our best recruitment tools. It projects an aura of openness and exploration that is very attractive to incoming students interested in design. It is also a testament to adaptive reuse in a rather radical and invigorating way. Its location on campus–near the Metro, directly adjacent to Mullen Library, and literally at the center of all campus activities–could not be improved. Further, its immediate adjacency to the Engineering School is a major convenience for all of our dual-degree students. Its well-maintained digital and analog equipment is accessible to all students.

The generous support of donors offers the opportunity to retain talent and acquire the resources necessary to pursue the School's strategic objectives over the next five years, as well as generate enthusiasm for the program and additional support from others.

Challenges

The School's challenges are the ones facing any organization–convening the right people, identifying and prioritizing the right objectives, maintaining solidarity, getting the work done, getting the word out, and protecting the organization from threats from within and without. Meeting these challenges is only limited by imagination, time, and resources.

The lack of institutional knowledge in the Dean's office is a liability, but it also is an opportunity to bring lessons and resources from practice into the academy. The diversity of positions, pedagogies, and research interests among the faculty make agreement on basic issues difficult, but they also bring vitality to the dialogue that is vital to creating a rich learning environment.

We aspire to enhance the School's reputation, celebrate its achievements, and cultivate its relationships through the pursuit of excellence. Excellence requires talent, time, and money. These things are never in sufficient supply for the goals one sets. Nevertheless, the School is undeterred, grateful for its resources, and will put them to their highest and best use.

Opportunities

The arrival of a new dean at a time of significant donor support for its mission, accreditation preparation, a faculty search, strategic planning, and a comprehensive curriculum review presents a rare opportunity for the School to examine itself critically, to ask what society expects from architects, to ask what architects are uniquely qualified to offer society, and to leverage the School's strengths to meet these needs.

We expect our graduates to develop the ability to identify and analyze complex design problems; to conceptualize, evaluate, and judge the appropriateness of alternate design solutions; and to develop design solutions into fully realized works of architecture, all in collaboration with a diversity of people and interests.

The mission, in particular, to sustain a culture that conserves and invents, builds neighborhoods one building at a time, and promotes ethical entrepreneurship, requires the program to focus on fundamental skills, enduring lessons, and a fruitful dialogue between advocates of different design philosophies.

Opportunities for tangible improvements include, but are not limited to, hiring tenure-track Faculty, expanding the pool of Lecturers, expanding the pool of Visiting Critics, producing lectures that are widely disseminated, producing exhibitions, producing publications, engaging alumni, developing relationships with other institutions, developing the foreign studies program in London and Rome, establishing a periodical and reference book library in the Crough Center, improving our program assessment procedures, improving the hybrid classrooms, making the mezzanines fully accessible, facing the Crough Center outward with a new front plaza for gathering and shop front windows to reveal work happening inside.

5.2.5 Ongoing outside input from others, including practitioners.

Program Response:

The Dean periodically confers with his counterparts at other institutions. They are a sounding board, the voice of experience, and a source of inspiration.

The Executive Committee continuously recruits candidates for Lecturer positions. This exposes the program to the critical observations of external experts and is a source of inspiration.

The growing Board of Visitors is a sounding board, a source of ideas, a source of financial support for faculty development, a cohort of ambassadors for the School, and a source of teaching expertise.

Jurors from other educational institutions and from the professional community are regularly invited to student design reviews. Their comments are part of the student performance evaluation and the program assessment.

The student produced Career Fair attracts employers from around the nation. The attendees are invited to provide post-Fair feedback on their experience with interviewees and their new hires.

The Notre Dame de Paris Truss project brought university leaders, educators, and craftspeople to work side-by-side with our Faculty and Students in a summer semester course. The cross-pollination of engineers, architects, historians, carpenters, professors, and entrepreneurs provided lessons in history, construction, and communication.

The program must also demonstrate that it regularly uses the results of self-assessments to advise and encourage changes and adjustments that promote student and faculty success.

Program Response:

The Faculty and Lecturers assembled on a weekly basis during the academic year for a lunchtime roundtable discussion led by designated faculty members on the following topics:

Fall 2021

Equity, Diversity, and Inclusion (including PC1, PC4, and PC8)
Environmental Stewardship and Professional Responsibility (including PC3, SC2, and SC3)
Leadership, Collaboration, and Community Engagement (including PC6 and SC1)
Design (including PC2, SC5, and SC6)
Knowledge and Innovation (including PC5)
Lifelong Learning (including PC7)

Spring 2022

Studio Culture
Thesis Reform
Design Methodologies and Team Teaching
Urban Design Workshop (with external experts)
Verbal and Written Presentation Skills
Manual and Digital Drawing
Architecture and Catholic Teaching

The Faculty and Lecturers convened in one long session in May to review and assess design course assignments, learning objectives, rubrics, and student work produced during the 2021/2022 academic year. At the conclusion of the session, the Faculty resolved to conduct regular reviews of the entire program in the areas of design, history, construction technology, professional practice, and thesis. Over the summer, members of the faculty were assigned to produce these reviews and report to the Faculty.

5.3 Curricular Development

The program must demonstrate a well-reasoned process for assessing its curriculum and making adjustments based on the outcome of the assessment.

Programs must also identify the frequency for assessing all or part of its curriculum.

Program Response:

Regular comprehensive curriculum assessments and adjustments, based on the 2020 NAAB Conditions, are new to the program. Until now, assessments and program changes were conducted by a Curriculum Committee on an as-needed basis. As Faculty members and Lecturers arrived and departed, as new courses were developed or expanded, and as new degree pathways were developed, the Curriculum Committee would recommend adjustments for approval by the Faculty. Today, the Faculty Advisory Committee (FAC) is responsible for assessments and adjustments to the curriculum. It meets on a regular basis to fulfill this responsibility.

5.3.1 The relationship between course assessment and curricular development, including NAAB program and student criteria.

Program Response:

Curricular Assessment and Development Process

The Faculty Advisory Committee (FAC) develops, adopts, and maintains the curricular goals and oversees their implementation by instructors and design studio coordinators. The Executive Committee reviews syllabi for conformance to the curricular goals. Student and instructor performances are reviewed by the Executive Committee and with individual instructors, using student course evaluations produced by the university at the end of each semester. The FAC as a whole, reviews, and comments on selected examples of high-pass and low-pass student design work at the completion of the academic year. Sessions will be convened to review other areas of the curriculum—history and theory, construction and technology, thesis, and professional practice—to provide a similar forum for assessment and development.

Annual Curricular Assessment Measures

The Executive Committee regularly assesses the program goals, curricular goals, compliance with NAAB Criteria, and student performance while rostering course offerings for each upcoming semester.

The faculty began preparing the Architectural Program Report in the fall 2020 by gathering information for a mock accreditation in the spring 2021; convening roundtable discussions on each NAAB Shared Value, Program Criteria and Student Criteria; holding regular twice-a-month meetings of the APR writers throughout the 2021/2022 academic year; and attending periodic workshops with an ACSA consultant. By taking these preparatory steps, the Faculty Advisory Committee developed a clear understanding of the 2020 NAAB Conditions for Accreditation and the need to develop regular course assessment procedures. Otherwise, no significant changes were implemented to the program except those required to address the deficiencies cited in the NAAB review of the School's 5-Year Interim Progress Report, dated May 28, 2021.

5.3.2 The roles and responsibilities of the personnel and committees involved in setting curricular agendas and initiatives, including the curriculum committee, program coordinators, and department chairs or directors.

Program Response:

The Faculty Advisory Committee (FAC) is responsible for setting curricular initiatives. The relatively small Faculty and need for close coordination among all aspects of the program called for consolidating the responsibility for assessing and amending the curriculum in one entity. The FAC is led by a chair who reports to the Executive Committee. The FAC will oversee a regular procedure and timetable for course assessments and improvements.

Over the past two years, the direct supervision of all studios by a studio coordinator drawn from the regular faculty has given us much greater control over the offering of the studio curriculum.

Also of note, the school has instituted a much more detailed review process for syllabi, overseen by the Associate Deans. One focus of that has been the direct checking of all syllabi for accurate NAAB criteria information, and discussions with faculty members about how those criteria are being addressed.

5.4 Human Resources and Human Resource Development

The program must demonstrate that it has appropriate and adequately funded human resources to support student learning and achievement. Human resources include full- and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. The program must:

5.4.1 Demonstrate that it balances the workloads of all faculty in a way that promotes student and faculty achievement.

Program Response:

The provost convened a Task Force on Faculty Workload Apportionment in March 2022 to study workload guidelines across the university. This action followed an earlier study by the University Unit Standards Committee which issued a report in the winter 2021. The Committee concluded that the schools are too diverse for one workload apportionment to suit all schools. A member of the School of Architecture and Planning faculty sits on Task Force and is collaborating with the Dean to develop a workload policy for the School.

The customary unwritten workload apportionment in the School is 40% teaching, 40% research, and 20% service. Faculty typically teach 18 credit hours in an academic year. There are anomalies in the workload, such as class sizes that range from 10 to 60 students, 6 credit hour studio courses with 12 hours of scheduled class time, thesis advising responsibilities without a consistent application of teaching credit hours, and no course release practices for tenure-track faculty or special circumstances. These will be addressed in the new guidelines. Our goal is to provide a basis for the fair distribution of work among faculty members and the flexibility to allow a faculty member to engage in research, scholarly activity, service in professional organizations, opportunities for personal professional development, and service to the community.

The University has a robust benefits program (Benefits). They include, but are not limited to, paid time off, sabbatical after 14 semesters of full-time teaching, leaves of absence for professional work, tuition remission, on-site training, development workshops, personal growth seminars, athletic facilities, chapels, etc to its faculty and staff.

The School offers a $2,000/year stipend to Faculty and Staff for professional development and participation in conferences.

The School is formulating an annual peer-reviewed research stipend of $5,000 to $15,000 to advance the dialogue between classical and modern design.

Full-time faculty are provided offices, a laptop computer, and access to all university resources, library privileges, educational training, teaching assistants, and research assistants.

Students are advised by the full-time Student Engagement Coordinator and the Associate Deans. Each Associate Dean teaches 6 credit hours per academic year. They devote the balance of their teaching time and service to advising students and operating the School. Together, this team offers robust coaching to each student as they navigate their pathway to graduation.

5.4.2 Demonstrate that it has an Architect Licensing Advisor who is actively performing the duties defined in the NCARB position description. These duties include attending the biannual NCARB Licensing Advisor Summit and/or other training opportunities to stay up-to-date on the requirements for licensure and ensure that students have resources to make informed decisions on their path to licensure.

Program Response:

Our outgoing Associate Dean of Undergraduate Studies served as the School's NCARB Advisor and IPAL Advisor for the last two years. Associate Professor James McCrery will serve both roles in the upcoming academic year. He has employed a number of IPAL program students as interns and full-time employees after graduation. His qualifications are as follows:

James C. McCrery, II, AIA, NCARB
Principal - McCrery Architects, PLLC
900 Massachusetts Ave, NE
Washington, DC 20002

NCARB:
Certificate #: 63968
Record #: 130377

AIA member #: 30218237

Licensed Architect:
AL, AR, CO, CT, DC, GA, ID, IL, IA, KS, MD, MI, MN, NC, OH, OK, PA, SC, TN, TX, VA

The Advisor serves as our single point of contact with the NCARB on all matters relating to the school, changes in the requirements for licensure, and is responsible for distributing announcements/updates/resources from NCARB to students, faculty and employers engaged in the IPAL program.

The IPAL Advisor presents the IPAL program to freshmen; on boards new cohorts; meets with IPAL students to confirm ARE progress/success, AXP progress, and internship questions; maintains the IPAL Blackboard Forum user list; maintains the NCARB IPAL Management page; and submits the IPAL Annual Report.

5.4.3 Demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement

Program Response:
The School offers a $2,000/year stipend to Faculty and Staff for professional development and participation in conferences. Other opportunities for professional development are offered by the University, through the School's membership in the ACSA, the School's subscriptions to ARE preparation materials, offerings by the local chapter of the AIA and other professional organizations at relatively low or no cost.

The School is formulating a process to award an annual research stipend between $5,000 and $15,000 for selected peer-reviewed proposals that advance the dialogue between classical and modern design.

5.4.4 Describe the support services available to students in the program, including but not limited to academic and personal advising, mental well-being, career guidance, internship, and job placement.

Program Response:

Center for Academic and Career Success

The Center for Academic and Career Success provides the guidance, resources and support that lead students to academic and career success. Whether they need help forming an academic plan or choosing a career pathway, our integrated approach provides individual support that helps students flourish in their studies while helping them prepare for a career that will bring joy and satisfaction.

Dean of Students

The Office of the Dean of Student (DOS) provides several services to students. It helps them mature and engage with the campus community. DOS services include:

- Assisting students in adjusting to university life and providing support with academic, personal, or social issues and concerns.
- Providing support in the event of a personal, medical, or family emergency (including temporary injuries).
- Discussing and answering questions about university policies, procedures, and services and directing students to appropriate campus resources. Click here for Policies and Procedures.
- Processing permanent withdrawals and temporary academic leaves from the University; whether planned or emergency. Click here for Academic Leave and/or Permanent Withdrawals.

5.5 Social Equity, Diversity, and Inclusion

The program must demonstrate its commitment to diversity and inclusion among current and prospective faculty, staff, and students. The program must:

5.5.1 Describe how this commitment is reflected in the distribution of its human, physical, and financial resources.

Program Response:

The School has long recognized the importance of attracting, maintaining, and supporting a diverse and inclusive community in order to advance its mission and educational objectives.

One of our greatest strengths is our diverse community. Our students, faculty, and administration are committed to creating an enriching learning environment. We value the perspective that each student brings to the School of Architecture and Planning and we embrace diversity in its broadest forms. Our commitment to diversity does not end with our students. It is reflected in all levels of our administration and our faculty as well.

As Pope Francis said in an address on Oct. 31st, 2014,

"Unity does not imply uniformity; it does not necessarily mean doing everything together or thinking in the same way. Nor does it signify a loss of identity. Unity in diversity is actually the opposite: it involves the joyful recognition and acceptance of the various gifts... It means knowing how to listen, to accept differences, and having the freedom to think differently and express oneself with complete respect towards the other who is my brother or sister. Do not be afraid of differences!"

[Address to Catholic Fraternity of the Charismatic Covenant Communities and Fellowship, Oct. 31, 2014]

As a school community, we are very aware of the importance of varying perspectives, diverse backgrounds, and contrasting experiences in the school classroom. It is our job not only to train the students to be the best architects, but to provide an enriching architectural education. We strive to attain a diverse class in order to produce professionals of conscience and compassion. Our graduates are well prepared to accept the most ambitious building projects due to their varied perspectives, ethical groundings, and strong community values.

Statement of Commitment to Anti-Racism Action

The School of Architecture and Planning stands in solidarity with the University President to condemn all forms of racism and oppression. We as faculty, staff, and administrative leaders, declare and affirm our commitment to anti-racist action this year and in the future. We support the work of the Sister Thea Bowman Committee which is charged with examining the University's current practices and making recommendations to promote racial equality in all aspects of its operations. We also support promoting racial equality beyond the campus through evaluating the University's engagement with the local communities.

Sister Thea Bowman Committee Report

In fall 2020, The Catholic University of America took a major step forward toward fulfilling its commitment to embrace and reflect the racial and ethnic diversity that enriches our Church, city, and nation. The Sister Thea Bowman Committee was formed to study all facets of University operations and make recommendations concerning racial equality to the University leadership.

In fall 2021, the committee released its report, complete with numerous recommendations for meaningful change.

Associate Dean of Engineering Mel Williams, Jr.

In a letter to the University community, on July 19, 2021, President John Garvey announced the appointment of Associate Dean of Engineering Mel Williams, Jr., to oversee diversity and inclusion initiatives at Catholic University.

Williams will begin in this part-time role on August 1. He will continue his responsibilities in the School of Engineering, where he has served since 2017.

As a special assistant, Williams will be accountable to President Kilpatrick for the execution of recommendations from the Sister Thea Bowman Committee, as well as related University strategic goals. One of the Committee's early recommendations was that the University appoint an individual who would be responsible for a sustained focus on diversity and its impact on University performance.

He serves as a member of the Executive Committee of the Administrative Council, and works collaboratively with the University's administration, faculty, staff, students and alumni to address matters of race and equality in University operations.

Williams meets monthly with President Kilpatrick and provides updates to the senior leadership each semester to track the University's progress and challenges in the areas of race and diversity. He will also work closely with the President's leadership team to provide strategic input.

Information for Immigrants

This is a complex and often confusing time in the United States, as numerous questions persist regarding federal policy on immigration. Across the nation, thousands of college students and their families, as well as many workers in a wide variety of positions, are feeling apprehensive because of ongoing uncertainty about their legal status.

As a supportive community of educators, religious, and dedicated lay professionals that respects the dignity of individuals from all backgrounds and values their potential to contribute to the common good of the country, The Catholic University of America is dedicated to providing information, resources, and support services that are responsive to the evolving needs of every member of our campus. We continue to stand with countless other colleges and universities in urging our elected leaders in Congress and the White House to work together, and swiftly, in developing sensible legislation to resolve the current debate over U.S. immigration policy. We also reaffirm our own commitment to diversity and inclusion, and to creating a campus environment at once conducive to our educational mission and true to our moral character.

In this context, The Catholic University of America will continue to:

- Hear and respond comprehensively to the individual needs of our immigrant students and employees
- Vigorously protect the privacy of all of our immigrant students and employees to the extent allowed by the law
- Withhold information about any student or employee's immigration status from any legal authority absent a valid warrant or other specific court order
- Require that any immigration enforcement agency seeking to interview a student or employee on campus present a valid warrant or subpoena to the University's General Counsel

- Collaborate with other nonprofit organizations, particularly Catholic Charities, in helping impacted students and employees access immigration legal services
- Work diligently to protect members of the Catholic University community from discrimination and any threats to personal liberty, individual dignity or academic freedom
- Recruit talented, high-achieving students, faculty, and staff regardless of national or ethnic origins
- Honor financial assistance commitments to students attending under the Deferred Action for Childhood Arrivals (DACA) program if their DACA status expires
- Consult with legal professionals, immigration experts, national higher education associations, and colleagues at peer institutions to analyze and understand new developments and leverage our combined strength in effecting positive change
- Support new legislation that secures the futures of students and other newcomers, immigrants, and refugees who only seek to make a better life for themselves in America

Although much remains uncertain, one thing is not: the University's mission, our shared work, and our people—all of our people—matter. We welcome, value and believe in our Dreamers and other immigrant members of our community, and will continue to take the necessary steps so that they might pursue their goals for education and personal fulfillment here at Catholic University.

5.5.2 Describe its plan for maintaining or increasing the diversity of its faculty and staff since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program's faculty and staff demographics with that of the program's students and other benchmarks the program deems relevant.

Program Response:

School of Architecture and Planning Action Plan

We commit ourselves to the following actions:

- Recruit and retain faculty and staff from diverse backgrounds
- Challenge our own prejudices with critical conversations and action
- Celebrate and bring awareness to all forms of diversity by interfacing with university programs
- Increase inclusivity and celebrations of all individuals within the school community
- Support diversity in curriculum development
- Increase collaboration with student groups on social justice and diversity issues within the school, university, and society at large.

5.5.3 Describe its plan for maintaining or increasing the diversity of its students since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program's student demographics with that of the institution and other benchmarks the program deems relevant.

Program Response:

Action Plan

We commit ourselves to the following actions:

- Recruit and retain students from diverse backgrounds
- Challenge our own prejudices with critical conversations and action
- Celebrate and bring awareness to all forms of diversity by interfacing with university programs
- Increase inclusivity and celebrations of all individuals within the school community

- Support diversity in curriculum development
- Increase collaboration with student groups on social justice and diversity issues within the school, university, and society at large.
- Establish an Equity, Diversity, and Inclusion Advisory Council composed of staff, faculty, alumni, and students.

Demographics

The University tracks students by gender, ethnicity, religious preference, and other attributes.

Demographic numbers 2017 - 2021

5.5.4 Document what institutional, college, or program policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other social equity, diversity, and inclusion initiatives at the program, college, or institutional level.

Program Response:

The University abides by its Anti-Discrimination and Anti-Harassment Policy.

Policy Statement

Our community is born of a shared commitment to core values. The Catholic University of America, guided by reason and the light of Catholic faith, is a community dedicated to the cultivation of knowledge, skills, wisdom, and virtue. Catholic teaching requires respect for the dignity of others. Membership in the University community brings with it the obligation to conduct oneself in ways that promote these goals, build up the community, and refrain from activity inconsistent with our shared goals and commitments. Consequently, Catholic University expects a higher standard of behavior than the law requires.

No person will be denied employment, admission, or educational opportunity, or otherwise be discriminated against or harassed in the University's programs or activities on the basis of race, color, religion, sex, national origin, age, marital status, personal appearance, family responsibilities, physical or mental disability, political affiliation, status as a veteran, or any other basis protected by applicable federal, state, or local laws or University policy. Nothing in this policy shall require The Catholic University of America to act in a manner contrary to the beliefs and teachings of the Catholic Church and the University's mission as the national university of the Catholic Church in the United States or to diminish its rights as a religious organization.

The complete policy statement can be found here.

Title IX, Sexual Harassment, Assault, and Violence

Title IX prohibits discrimination on the basis of sex in educational programs and activities receiving federal financial assistance. The Catholic University of America is committed to preventing and responding to discrimination on the basis of sex, including sexual harassment, sexual assault, dating violence, domestic violence, and stalking.

This website has been designed to help people searching to obtain help after sexual violence, to resolve frequently asked questions about sexual violence, to learn about the university policies, procedures and reports, and to identify key contacts at Catholic University who work with Title IX and can support any sexual violence experience.

5.5.5 Describe the resources and procedures in place to provide adaptive environments and effective strategies to support faculty, staff, and students with different physical and/or mental abilities

Program Response:

The Catholic University of America is committed to ensuring that all qualified individuals with disabilities have the opportunity to participate in educational programs and services on an equal basis. The University supports the integration of all qualified individuals into the programs of the University and is committed to full compliance with all laws regarding equal opportunity for all students with a disability. At the University, students, Disability Support Services (DSS), faculty, academic deans and department chairs, and the Equal Opportunity Officer all play a joint role in promoting equal access to campus facilities and programs.

Under the Americans with Disabilities Act of 1990, as amended, and Section 504 of the Rehabilitation Act, all qualified students with a disability (as defined under the law) are eligible for reasonable accommodations or modifications in the academic environment that enable the qualified individual to enjoy equal access to the University's programs, services or activities. Programs and activities must be provided in the most integrated setting appropriate. The University is not required to provide any aid or service that would result in a fundamental alteration to the nature of the program.

DSS provides disability consultation, advocacy and the coordination of support services and accommodations for all qualified students with disabilities. Services and accommodations are determined individually based on disability documentation. In order to receive services, students must disclose their disability to DSS and be found eligible for an accommodation by DSS.

5.6 Physical Resources

The program must describe its physical resources and demonstrate how they safely and equitably support the program's pedagogical approach and student and faculty achievement. Physical resources include but are not limited to the following:

As a general note on facilities, a major emphasis of the school over the past three years has been in upgrades to our physical plant. In aggregate, these involved an expenditure of approximately $1,250,000. While there was disruption and issues of easy access (to the building's front, particularly) due to these improvements, we felt the gains far outweighed any debits. At no point within the past 20 years has the building been in as good of shape as it is today. The detailed list of improvements is extensive:

1) Basement Pinup Hallway
    a. New ceiling lights
2) Computer Lab 119
    a. 8 new computers
    b. 16 new monitors
    c. New ceiling lights
    d. New counters
    e. New computer chairs
3) Computer Lab 124
    a. 8 new computers
    b. New ceiling lights
    c. New counters
    d. New computer chairs
4) Computer Lab B15
    a. 7 new computers
    b. 14 new monitors

   c. New computer chairs
5) Conference Room B16
   a. creation of a new conference room
   b. 72” TV for presentations
   c. New AV system for hybrid classroom
6) Koubek Auditorium
   a. New carpet
   b. New chairs
   c. New paint
   d. New podium
   e. New projector
   f. Floor refinished and resealed
7) Locraft
   a. New podium
   b. New projector
8) Miller
   a. Floors scuffed and re-sealed
9) Print Lab
   a. 1 new high speed plotter
   b. 1 new watercolor plotter
   c. 3 new printers
   d. 4 new plotters
   e. New ceiling lights
   f. New large format scanner
10) Studios
   a. Floors refinished and resealed
   b. New ceiling lights
   c. New desks and new chairs
   d. 12 new TVs for digital presentations
11) Wailing Walls
   a. Floors scuffed and re-sealed
12) Woodshop
   a. New band saw
   b. New drum sander
   c. New planer
   d. 2 new belt/disc sanders
   e. New drill press
   f. New jointer
   g. 3 new laser cutters
13) 3D Print Lab
   a. 2 new MAKEiT PRO 3D printers (rapid prototype)
   b. 3 new Pulse XE 3D printers
   c. 6 new large-format Ultimakers (high definition)
14) Bathrooms
   a. Complete renovation
15) Exterior
   a. Colonnade re-stucco
   b. Exterior power wash
   c. New lights over exterior doors

5.6.1 Space to support and encourage studio-based learning.

Program Response: The school is housed in a re-purposed gymnasium. Offices dedicated to faculty and staff are consolidated around the main entry lobby on the first floor and the primary seminar room on the second floor. Studio alcoves, classrooms, computer labs, print shops, the

gallery, and the auditorium are located on the first floor.. Additional studio alcoves are located on two mezzanines separated by the auditorium. The fabrication shops and additional classrooms are located on the basement level which is open to grade. The building is accessible by key card at the front door, back door, and multiple side doors.

There are 270 desks under one roof in two large studios. The studios have mezzanines. Each level is partially subdivided into alcoves. The alcoves offer privacy for instruction and foster class cohesion while permitting physical connections to all other alcoves. In many ways, the physical situation is ideal for the flexibility required of studio teaching. Each student is provided with a desk and chair for their use. Students provide their own laptop, software, drawing and modeling tools, and materials.

All walls, except the perimeter walls, serve as pin-up boards. The Miller Gallery and designated alcoves are used for class seminars and reviews. Exhibitions, reviews, and receptions are staged in the Miller Gallery adjacent to the main entrance lobby. The Koubek Auditorium, at the opposite end of the building, has raked seating for 226 people. The student lounge, on the mezzanine level, overlooks the Miller gallery

5.6.2 Space to support and encourage didactic and interactive learning, including lecture halls, seminar spaces, small group study rooms, labs, shops, and equipment.

Program Response: The computer labs, 3D print shop, print shop, and the AIAS-operated materials store are located on the first floor adjacent to studio alcoves. The woodshop, laser-cutter room, and photography studio are on the basement level. There are four classrooms with hybrid teaching AV equipment—a small classroom (seats 20 people) and a large classroom (seats 66 people) on the basement level (open to grade), a large lecture hall on the first floor (seats 226 people) and a seminar room on the second floor (seats 40 people). Faculty offices are on the first floor flanking the main entrance lobby and on the second floor flanking the primary seminar room.

5.6.3 Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.

Program Response: Full-time faculty are provided offices, a laptop or desktop computer, access to all university resources, architecture software, library privileges, educational training, teaching assistants, and research assistants. The close proximity of the woodshop, labs and studios facilitates close coordination between the woodshop manager and design studio instructors. Model building is an important part of all design studio activity. Modeling with Virtual Reality software is under investigation.

5.6.4 Resources to support all learning formats and pedagogies in use by the program.

Program Response: All facilities are regularly used. Equipment is maintained in good working order. Adequate supplies are maintained to allow machines to operate without disruption. AV equipment is improved from time to time to make the hybrid classroom experience as frictionless as possible.

A major emphasis of the school's new administration was providing enhanced methods for incorporating student desk crits, pin-ups and juries online. It was clear even as the campus locked down that at some point soon enough the situation would transform back to what would likely be more of a hybrid mode of ongoing instruction. This was likely to continue for some time– particularly given our international students, who potentially were going to face long-term difficulties with traveling to the US. Enormous effort, under very trying circumstances, was made to equip most studio areas with large screen TV capabilities and provide mobile screen capabilities for jury and critique areas. Substantial upgrades were made in all of our primary

teaching spaces to accommodate multiple camera views and microphones and to make the anticipated blended format approaches viable. All these changes have proved essential. While the majority of the program (as of this writing) is now again occurring in person, the transition back to that was complex and these various improvements proved essential. As of today, the school is equipped for changing modalities better than at any time in its history. Every semester going forward will have to be approached with an understanding that a transition to another mode of instruction may become necessary.

If the program's pedagogy does not require some or all of the above physical resources, the program must describe the effect (if any) that online, off-site, or hybrid formats have on digital and physical resources.

Program Response: The Crough Center studio is furnished with 270 student desks. Current enrollment is about 240 students, leaving 30 desks unused. The classrooms, labs and workshops are utilized on a regular full-time basis during the academic year. The Crough Center is used during the summer semester for a short list of courses and the Experiences-in-Architecture program for high school students. The building is empty for three weeks in August, allowing just long enough to prepare for the fall semester.

5.7 Financial Resources

The program must demonstrate that it has the appropriate institutional support and financial resources to support student learning and achievement during the next term of accreditation.

Program Response: The University Budget Committee is responsible for oversight of the annual budget preparation process. Its work focuses upon formation of balanced and achievable University operating (Funds 11, 12, 15, and 20) and capital budget proposals, which are then presented for endorsement by the President followed by submission to the Board of Trustees for its approval. In addition, the University Budget Committee provides oversight and recommendations in regard to the University's budget policies for sponsored activity, investment pool payout activity, designated funds, and capital campaign funds.

The Committee reports to the University President through the Vice President for Finance & Treasurer, who serves as Committee Chair. Member roles include the University vice presidents and a representative of the Academic Senate. The Committee is principally supported by the Associate Vice President for Financial Planning, Institutional Research and Assessment, with assistance from budget professionals in the University Budget Office and the Provost's Office.

Committee members for the FY 2023 planning year:

Judi Biggs Garbuio, Ph.D.
D. Aaron Dominguez, Ph.D.
William P. Loewe, Ph.D.
Karna Lozoya
Christopher P. Lydon, M.A.
Lawrence J. Morris
Scott P. Rembold, M.A.
Robert M. Specter, M.S., M.B.A. (Chair)

Support Staff:

J. Steven Brown
Brian Johnston
Rita Kovach
Joe Miranda

In the final half of the FY 2023 planning year, the Budget Committee will engage in a rigorous discussion of new revenue generation, rightsizing, and priority balancing for the next five years. The structure of these discussions will be determined by the Committee itself under the direction of the Vice President for Finance and Treasurer. The expectation is that these discussions will allow the University to chart a path forward from the lows of the pandemic to a sustainable path of future growth.

A detailed planning calendar is developed by the support staff in advance of the first meeting of the Committee to guide its work. Weekly meetings for the University Budget Committee typically begin in October and conclude in February. The Committee's recommendations for revenue drivers (tuition, required fees, and room & board rates) and capital priorities must be finalized and submitted to the President by the middle of November to facilitate timely approvals, stakeholder communication and execution. Formation and endorsement of the FY 2023 Operating Budget is timed to be submitted to the full Board of Trustees through its Finance Committee in March.

Revenue expectations and goals are annually discussed in the context of the resource allocations necessary to support these goals. The planning horizon for revenue is five years, and presentations in each of the following major revenue areas of the University are accompanied by a five-year plan to drive revenue growth. Supporting data and planning are submitted as follows:

Undergraduate Enrollment: Vice President for Enrollment Management and Vice President for Finance & Treasurer
Graduate and Online Enrollment: Provost and Vice President for Finance & Treasurer
Operating Net Contribution for the Columbus School of Law: Provost and Vice President for Finance & Treasurer
Operating Net Contribution for Auxiliary Operations: Vice President for Finance & Treasurer and Vice President for Student Affairs
Summer Enrollment: Provost and Vice President for Finance & Treasurer
Contribution Revenue: Vice President for University Advancement

The Committee is responsible for approving each of these various submissions and ensuring that they provide a realistic projection of the University's revenues for the planning years under consideration.

The President* and each vice president prepares his/her operating budget requirements for the planning year, including a detailed plan and rationale for any new mandatory expenditures. The Committee reviews and prioritizes all of them.

The President* and each vice president works with the Associate Vice President of Facilities and the Chief Information Officer to identify their immediate and long-term capital needs and priorities. The Associate Vice President of Facilities and Chief Information Officer prepare a comprehensive and prioritized proposal of capital spending requests covering five prospective planning years and present this proposal to the Committee. The Committee is responsible for identifying the capital projects/equipment that will be recommended for execution in the first year of the five year plan. It may further recommend multiple-year projects as warranted. Where possible, Capital requests should specify funding source.

The following factors are foremost among those that will be considered by the Committee to prioritize requests:

Correspondence to the Campus Master Plan
Correspondence to the Strategic Plan
Fire, life safety, and other code compliance
Accessibility
Accreditation impact

Deferred maintenance resolution
Overcome technological obsolescence
Support programmatic adaptation
Energy efficiency / sustainability

The Committee's recommendations of Capital priorities must be finalized and submitted to the President by the middle of November to facilitate timely approvals, stakeholder communication and execution.

(*The President's Office operating budget, proposed presidential initiatives and capital requests are prepared by the Chief of Staff on behalf of the President.)

The Office of the Provost, in consultation with the University Budget Committee, determines the annual operating budgets of the Academic Affairs Division. The School influences salaries, controls expenses, and works with the Office of the Provost to plan future operating expenses tied to enrollment and research. The budget allocation for salaries and expenses are fixed by the Office of the Provost.

The School has discretion to allocate funds within each category. The University funds operating expenses, undergraduate scholarships, and graduate scholarships. School endowments augment graduate scholarships. School gifts partially fund faculty salaries, faculty and staff development, faculty research, guest instructor expenses, classroom AV upgrades, student prizes, ARE study guides, studio materials, and receptions.

Enrollment is expected to remain stable or grow moderately. The physical resources available in the Crough Center can serve 270 students (current enrollment is about 240 students). Funding is expected to remain stable or grow moderately in pace with enrollment. Moderate growth in current-use gifts from the Board of Visitors is anticipated.

No significant changes in funding models or facilities have occurred since the last visit. However, the university implemented a temporary fiscal austerity plan in 2020 which reduced school budgets and imposed an 18 month 4% salary reduction on all faculty and staff. Coming out of the budget austerity measures, a 3% salary increase for all faculty and staff was implemented in August 2022 to promote growth.

In the past two years, in an effort to increase undergraduate and graduate enrollment, the university has funded initiatives to define and market the university's brand. It also has taken steps to elevate the university's ranking from R-2 to R-1. These initiatives come at the same time as a successful $400,000,000 university fundraising campaign with plans to continue in future years. The campaign's success includes annual alumni and Board of Visitor gifts to the School to support its operation and strategic goals.

Our multi-year financial projection can be found here:

Multi-Year Architecture Operation Plan

5.8 Information Resources

The program must demonstrate that all students, faculty, and staff have convenient and equitable access to architecture literature and information, as well as appropriate visual and digital resources that support professional education in architecture.

Program Response:

The Mullen Library supports the education and research activities of our students, faculty and staff. The collection includes access to Washington Research Libraries Consortium.

Approximately 12 million titles are accessible within 24 hours. The and the Interlibrary Loan service provides greater access, but requests require 2 to 3 weeks to fill. New titles are selected and acquired according to a profile set up by the University Libraries.

As part of the WRLC, we are part of the national networks' Networked Digital Library of Theses and Dissertations (NDLTD) and Directory of Open Access Repositories (DOAR).

Our Architecture and Planning Guide provides an overview of our resources in these subject areas. Architecture-specific databases to which we subscribe are located here.

The School aspires to reestablish a satellite library in the Crough Center with a collection of print periodicals and commonly used reference books. It is intended to have a lounge-like ambiance and serve as a gathering place for students and faculty outside of the classroom.

Further, the program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resource professionals who provide discipline-relevant information services that support teaching and research.

Program Response:

The university employs a full-time, professionally trained librarian, Joan Stahl, to offer information literacy instruction to architecture students. Library staff are available for educational workshops and tutorials, either one-on-one or within a course setting. Possible topics include: Getting started on a digital project, data cleaning 101, text and data analysis, working with data sets, data visualization techniques, and funding opportunities. Library staff can assist in developing digital projects, recommending tools and methodologies, teaching workshops on topics/tools, consulting on data management needs, determining the preservation of a project, establishing a digital presence through ORCID, and addressing many of the issues listed above.

Digital Scholarship (DS) is the use of digital technologies for answering research questions, teaching in innovative ways, publishing scholarly material on new platforms, and preserving the digital record for future research. Issues in digital scholarship can involve scholars knowing their publishing rights, putting together a successful digital portfolio for promotion and tenure, avoiding predatory publishers, putting together a data management plan, writing successful grants, and understanding copyright issues.

Designated library staff can consult with researchers about writing a data plan, managing data, and sharing data.

For projects requiring digital art and design, The Salve Regina Digital Arts Lab in Mullen Library has 16 workstations with Mac Pro Two Quad-Core Intel Zeon with Apple LED Cinema Display 27" flat panel, Adobe CC Creative Suite software, cameras, scanner, lighting, photo printer, and tablets.

Mullen Library General Hours

Monday – Friday, 9am – 8pm

Friday – 9am – 5pm

Saturday – 10am – 5pm

Sunday – 1pm -5pm

6—Public Information

The NAAB expects accredited degree programs to provide information to the public about accreditation activities and the relationship between the program and the NAAB, admissions and advising, and career information, as well as accurate public information about accredited and non-accredited architecture programs. The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the public. As a result, all NAAB-accredited programs are required to ensure that the following information is posted online and is easily available to the public.

6.1 Statement on NAAB-Accredited Degrees

All institutions offering a NAAB-accredited degree program or any candidacy program must include the exact language found in the NAAB Conditions for Accreditation, 2020 Edition, Appendix 2, in catalogs and promotional media, including the program's website.

Program Response:

Catholic University's professional program in architecture is fully accredited by the National Architectural Accrediting Board (NAAB), the sole agency authorized to accredit U.S. professional degree programs in architecture. The school received the maximum term of accreditation during its last review in April 2015.

In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year term, an eight-year term with conditions, or a two-year term of continuing accreditation, or a three-year term of initial accreditation, depending on the extent of its conformance with established education standards.

Doctor of Architecture and Master of Architecture degree programs may require a non-accredited undergraduate degree in architecture for admission. However, the non-accredited degree is not, by itself, recognized as an accredited degree.

The Catholic University of America, School of Architecture and Planning offers the following NAAB-accredited degree programs:

Master of Architecture, Two Year, Professional degree, 60 graduate credits
Master of Architecture, Three Year, Professional degree, 111 graduate credits

Next accreditation visit for all programs: 2023

Access: https://architecture.catholic.edu/about-us/accreditation/index.html

6.2 Access to NAAB Conditions and Procedures

The program must make the following documents available to all students, faculty, and the public, via the program's website:

a) Conditions for Accreditation, 2020 Edition
b) Conditions for Accreditation in effect at the time of the last visit (2009 or 2014, depending on the date of the last visit)
c) Procedures for Accreditation, 2020 Edition
d) Procedures for Accreditation in effect at the time of the last visit (2012 or 2015, depending on the date of the last visit)

Program Response:

All documents are available here: https://architecture.catholic.edu/about-us/accreditation/index.html

6.3 Access to Career Development Information

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

Program Response:

After matriculating at the School of Architecture and Planning, students are assigned to an individual career advisor who follows up with them regularly and assists them with training opportunities, connecting with employers, and building their curriculum vitae and portfolio.

We have an integrative approach to academic and career advising. When students matriculate, they are assigned an academic and career advisor in the Center for Academic and Career Success. The advisor helps them register for classes and begins a discussion about long term career plans. The department encourages students to prepare resumes, attend career fairs, and find summer internships early in their academic career. After freshman year, students transition to advisors in the School of Architecture and Planning. Our Associate Deans and Student Experience Coordinator advise them on their academic career going forward. The Center for Academic and Career Success continues to advise them on their career until graduation. The integrative approach requires a close collaboration between the School's Associate Deans, Student Engagement Coordinator, and the Center for Career Success. They remain in close contact with each other and discuss the student's performance regularly.

The Center for Academic and Career Success offers one-on-one meetings to all students, from freshmen to graduate level and provides a personalized plan that includes, but is not limited to, teaching interviewing skills, developing networking knowledge, and building long and short-term career goals. There are also a variety of resources available: video tutorials on LinkedIn learning, handshake, cardinal connect - our community networking platform, all available through our website:

https://success.catholic.edu/career-support/index.html

The Center for Academic and Career Success also organizes an annual career fair for all matriculated students at Catholic University and assists our school in our own annual career fair, following up with the firms that attended the events and connecting students with them. In 2022, our career fair had the participation of more than 30 firms and it was all organized by our student leadership organization AIAS.

6.4 Public Access to Accreditation Reports and Related Documents

To promote transparency in the process of accreditation in architecture education, the program must make the following documents available to all students, faculty, and the public, via the program's website:

a) All Interim Progress Reports and narratives of Program Annual Reports submitted since the last team visit
b) All NAAB responses to any Plan to Correct and any NAAB responses to the Program Annual Reports since the last team visit
c) The most recent decision letter from the NAAB
d) The Architecture Program Report submitted for the last visit
e) The final edition of the most recent Visiting Team Report, including attachments and addenda

f) The program's optional response to the Visiting Team Report
g) Plan to Correct (if applicable)
h) NCARB ARE pass rates
i) Statements and/or policies on learning and teaching culture
j) Statements and/or policies on diversity, equity, and inclusion

Program Response:

All NAAB related documents are available here: https://architecture.catholic.edu/about-us/accreditation/index.html

6.5 Admissions and Advising

The program must publicly document all policies and procedures that govern the evaluation of applicants for admission to the accredited program. These procedures must include first-time, first-year students as well as transfers from within and outside the institution. This documentation must include the following:

a) Application forms and instructions
b) Admissions requirements; admissions-decisions procedures, including policies and processes for evaluation of transcripts and portfolios (when required); and decisions regarding remediation and advanced standing
c) Forms and a description of the process for evaluating the content of a non-accredited degrees
d) Requirements and forms for applying for financial aid and scholarships
e) Explanation of how student diversity goals affect admission procedures

Program Response:

The university website provides detailed information about the application process and admission requirements and procedures for undergraduate and graduate students.

School of Architecture and Planning website:

https://architecture.catholic.edu/admission/undergraduate/index.html
https://architecture.catholic.edu/admission/graduate-programs/index.html

University website:

https://www.catholic.edu/admission/undergraduate/first-year-students/application-process/index.html

Policies:

https://policies.catholic.edu/students/enrollment/admissionfull.html

https://policies.catholic.edu/students/academicgrad/admissionfull.html

Application Guide:

https://drive.google.com/file/d/1O0Pj0LjZXFkn-M9n7AXu6sqIqSu620Oy/view?usp=sharing

If the income student is coming from a non-accredited BS. Arch. degree, they will join our 3 years Master Degree program track.

If they have credits for a class that has an equivalent syllabus with ours, they may have their syllabus reviewed by faculty for potential course waiver and be excused to take that class

Our forms and advising information can be found here:

https://architecture.catholic.edu/academics/undergraduate-advising/index.html
https://architecture.catholic.edu/academics/undergraduate-advising/forms-and-request/index.html

Financial Aid forms and scholarships information can be found here:

https://www.catholic.edu/admission/undergraduate/first-year-students/scholarships/index.html
https://www.catholic.edu/admission/undergraduate/first-year-students/financial-aid/index.html

Our Admission to Undergraduate study policy can be found here:

https://policies.catholic.edu/students/enrollment/admissionfull.html#iii

Our Anti-Discimination and Anti-harassment policy can be found here:

https://policies.catholic.edu/faculty-staff/employment/eeo/affirmact.html

"The Catholic University of America admits qualified candidates regardless of race, color, religion, sex, national origin, age, marital status, personal appearance, family responsibilities, physical or mental disability, political affiliation, status as a veteran, or any other basis protected by applicable Federal and District of Columbia laws, and does not discriminate against students or applicants for admission on any such basis in the administration of its educational or admission policies or in any aspect of its operations. The University is the national university of the Catholic Church in the United States and the University's policies and practices, which govern the University community, are grounded in the teachings of the Catholic faith."

6.6 Student Financial Information

6.6.1 The program must demonstrate that students have access to current resources and advice for making decisions about financial aid.

Program Response:

The Office of Student Financial Assistance (OSFA) provides full service counseling to students and their parents to discuss financial aid resources to help meet their educational costs. The website for application process, deadlines, programs, policies in addition to general information and to request an appointment can be found at: https://financial-aid.catholic.edu/.

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

Program Response:

The OSFA website provides a breakdown of direct and indirect costs by providing an interactive planner to help families determine their out of pocket expenses. This tool is very useful after a student has their award package. We provide a direct link to our comprehensive cost disclosures for program specific fees.

Below is the link to our college cost planner:https://financial-aid.catholic.edu/costs/undergraduate-costs.html

NAAB

APPENDIX

1. Middle States Accreditation Report Letter
2. Full-Time Faculty Curriculum Vitae
    a. Patricia Andrasik, Associate Professor (tenured)
    b. Julio Bermudez, Professor (tenured)
    c. Mark Ferguson, Dean (tenured)
    d. Lavinia Fici-Pasquina, Associate Professor (tenured)
    e. Christopher J. Howard, Assistant Professor (tenure-track)
    f. James McCrery, Associate Professor (tenured)
    g. Jason Montgomery, Associate Professor (tenure-track)
    h. Adnan Morshed, Professor (tenured)
    i. Tonya Ohnstad, Assistant Professor (tenure-track)
    j. Randall Ott, Ordinary Professor (tenured)
    k. Ana Maria Roman Andrino, Assistant Professor of Practice
    l. Nathaniel Walker, Associate Professor (tenure-track)
3. Matrix M. Arch. 2
4. Matrix M. Arch. 3

MSCHE
MIDDLE STATES COMMISSION ON HIGHER EDUCATION

July 7, 2021

Mr. John Garvey
President
Catholic University of America, The
Cardinal Station
Washington, DC 20064

Dear Mr. Garvey:

The Middle States Commission on Higher Education took action on June 24, 2021. This serves as official notice that an accreditation action has been taken and now appears on the institution's Statement of Accreditation Status (SAS) which can be found on your institution directory page at www.msche.org.

If any of the information contained within the action appears to be factually incorrect, please send an email within 30 calendar days of the action to actions@msche.org.

Please visit the Commission's policies and procedures for more information:

Accreditation Actions Policy and Procedures

Accreditation Review Cycle and Monitoring Policy and Procedures

Communication in the Accreditation Process Policy and Procedures

Public Disclosures Policy and Procedures

Standards for Accreditation and Requirements of Affiliation

For questions about the Commission's actions, please contact the institution's assigned Commission staff liaison. Questions from the public about the institution's accreditation phase or accreditation status can be directed to communications@msche.org.

Sincerely,

Heather F. Perfetti, J.D., Ed.D.
President

MSCHE
MIDDLE STATES COMMISSION ON HIGHER EDUCATION
3624 Market Street
Suite 2 West
Philadelphia, PA 19104
www.msche.org
Follow us: @mscheorg

STATEMENT OF ACCREDITATION STATUS

The Statement of Accreditation Status (SAS) is the official statement of the Middle States Commission on Higher Education (MSCHE) about each institution's current accreditation status and scope of accreditation. The SAS also provides a brief history of the actions taken by the Commission.

Institution:	**CATHOLIC UNIVERSITY OF AMERICA, THE**	Washington, DC
Address:	Cardinal Station Washington, DC 20064	
Phone:	(202) 319-5000	
URL:	**www.cua.edu**	
Accreditation Liaison Officer (ALO):	Dr. Duilia de Mello	
Commission Staff Liaison:	Dr. Kushnood Haq, Vice President	

Accreditation Summary

For more information, see the Commission's **Accreditation Actions Policy and Procedures**.

Phase: Accredited

Status: Accreditation Reaffirmed

Accreditation Granted: 1921

Last Reaffirmation: 2020

Next Self-Study Evaluation: 2027-2028

Next Mid-Point Peer Review: 2024

Alternative Delivery Methods

The following represents approved alternative delivery methods included in the scope of the institution's accreditation:

Distance Education

Approved to offer programs by this delivery method

Correspondence Education

Not approved for this delivery method

Credential Levels

Approved Credential Levels

The following represents credential levels included in the scope of the institution's accreditation:

- **Postsecondary award (1-2 yrs)**
  Included within the scope:
- **Associate's Degree or Equivalent**
  Included within the scope:
- **Bachelor's Degree or Equivalent**
  Included within the scope:
- **Post-baccalaureate Certificate**
  Included within the scope:
- **Master's Degree or Equivalent**
  Included within the scope:
- **Post-Master's Certificate**
  Included within the scope:
- **Doctor's Degree - Professional Practice**
  Included within the scope:
- **Doctor's Degree- Research/Scholarship**
  Included within the scope:

Locations

The following represents branch campuses, additional locations, and other instructional sites that are included within the scope of the institution's accreditation:

Location	Type
Alexandria 2050 Ballenger Ave #200 Alexandria, VA 22314	Additional Location
Community and Family Services International Manila Philippines	Additional Location
Cotabato City State Polytechnic College Marawi City Philippines	Additional Location
Crystal City 1480 Crystal Drive Crystal City, VA 22202	Additional Location
George Mason University 4400 University Drive Fairfax, VA 22030	Additional Location
Hall of States 444 North Capital Street, NW Washington, DC 20001	Additional Location
Huntington Ingalls Industries – Newport News Shipbuilding (HII-NNS) 300 M Street SE Washington, DC 20003	Additional Location
Library of Congress 101 Independence Ave, SE Washington, DC 20540	Additional Location

Location	Type
Mindanao State University Marawi City Philippines	Additional Location
Naval Surface Warfare Center Carderock Division 9500 MacArther Blvd West Bethesda, MD 20817	Additional Location
Night Vision Lab 10221 Burbick Road Suite 430 Fort Belvoir, VA 22060	Additional Location
Old Dominion University Norfolk, VA	Additional Location
The Catholic University of America – Tucson Program (on-site at PCC) 4905-B East Broadway Blvd. Tucson, AZ 85709-1100	Additional Location
Virginia Commonwealth University 1111 W. Broad St Richmond, VA 23284	Additional Location
Western Mindanao State University Zamboanga City Philippines	Additional Location
Children's National Medical Center 111 Michigan Ave. NW Washington, DC 20010	Other Instructional Site
District of Columbia Department of Transportation (DDOT) 55 M Street SE, fourth floor Washington, DC 20003	Other Instructional Site
Eleanor Roosevelt High School 7601 Hanover Pkwy Greenbelt, MD 20770	Other Instructional Site

Location	Type
Hilton Rockville 1750 Rockville Pike Rockville, MD 20852	Other Instructional Site
Johns Hopkins University 3400 N Charles St. Baltimore, MD 21218	Other Instructional Site
Library of Congress 101 Independence Ave SE Washington, DC 20540	Other Instructional Site
National Gallery of Art 6th and Constitution Ave. NW Washington, DC 20565	Other Instructional Site
NIH 9000 Rockville Pike Bethesda, MD 20892	Other Instructional Site
United States Department of Veterans Affairs 810 Vermont Avenue NW Washington, DC 20420	Other Instructional Site

Definitions: For definitions of branch campus, additional locations, or other instructional sites, see the **Commission's Substantive Change Policy and Procedures**.

Accreditation Actions

The following represents the MSCHE accreditation actions taken in the last ten (10) years. For more information, see the **Commission's Accreditation Actions Policy and Procedures** *and* **the Substantive Change Policy and Procedures**.

June 24, 2021	To acknowledge receipt of the supplemental information report. The next evaluation visit is scheduled for 2027-2028.
June 25, 2020	To acknowledge receipt of the self-study report. To note the visit by the Commission's representatives. To reaffirm accreditation. To request a supplemental information report, due April 1, 2021, documenting: (1) implementation of organized and systematic assessments that evaluate the extent of student achievement (Standard V) and (2) implementation of organized and systematic assessments that evaluate the extent of student achievement in general education (Standard V). The next evaluation visit is scheduled for 2027-2028.
April 30, 2020	To acknowledge receipt of the substantive change request. To include the additional location at Alexandria, 2050 Ballenger Ave #200, Alexandria, VA 22314 within the institution's scope of accreditation. To require written evidence of approvals from all necessary licensing, regulatory, or other legal entities as necessary, including State Council for Higher Education for Virginia (SCHEV). To require immediate notification when instruction commences at the additional location. To note that the Commission may rescind this action if instruction does not commence within one calendar year from the date of this action. The next evaluation visit is scheduled for 2019-2020.
March 4, 2019	To acknowledge receipt of the substantive change request. To include the additional location at The Catholic University of America – Tucson Program, 4905-B East Broadway Blvd., Tucson, AZ 85709-1100 within the institution's scope of accreditation. To require written evidence of approvals from all necessary licensing, regulatory, or other legal entities as necessary, including Arizona State Board for Private Postsecondary Education. To require immediate notification when instruction commences at each location. To note that the Commission may rescind this action if instruction does not commence within one calendar year from the date of this action. The next evaluation visit is scheduled for 2019-2020.

March 4, 2019

	To acknowledge receipt of the substantive change request. To include the additional location at Huntington Ingalls Industries – Newport News Shipbuilding (HII-NNS), 300 M Street SE, Washington, DC 20003 within the institution's scope of accreditation. To note that the Commission may rescind this action if instruction does not commence within one calendar year from the date of this action.
November 19, 2015	To accept the Periodic Review Report, to reaffirm accreditation, and to commend the institution for the quality of the Periodic Review Report Process. The next evaluation visit is scheduled for 2019-2020.
September 2, 2014	To acknowledge receipt of the substantive change request. To note that the institution has closed the following additional locations: (1) Southern Maryland Higher Education, 44219 Airport Road, California, MD 20619 ; (2) CFSI Center for Excellence in Humanitarian Services, 21 Rosales Street, Rosary Heights VI, Cotabato City, Mindanao Phillipines; and (3) Brothers in Charity, Kriubeke Belgium. To remove these additional locations from the institution's accreditation. The Periodic Review Report is due June 1, 2015.
June 28, 2012	To accept the progress report. The Periodic Review Report is due June 1, 2015.
January 3, 2012	To acknowledge receipt of the substantive change request and to include the online Master of Arts in Human Resource Management and Master of Science in Management degrees within the scope of the institution's accreditation. To remind the institution that the progress report, due by April 1, 2012, should document (1) inclusion in the new strategic plan of measurable objectives, assignment of responsibilities, explicit links to unit plans, and appropriate assessment measure (Standard 2) and (2) continuing institutional support for the assessment of institutional effectiveness and of the achievement of intended student learning outcomes (Standards 7 and 14). The Periodic Review Report is due June 1, 2015.

Information about the Middle States Commission on Higher Education

The Middle States Commission on Higher Education (MSCHE) is one of seven institutional accrediting organizations in the United States and is recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA). MSCHE accreditation applies to an institution as a whole rather than the specific programs within an institution. MSCHE does not approve or accredit individual programs. The MSCHE accreditation review cycle is continuous and accreditation does not expire. Each institution is reevaluated and monitored on a regular and consistent basis in accordance with the institution's assigned accreditation review cycle and Commission policy and procedures. An institution maintains its accreditation unless it is voluntarily surrendered or withdrawn by the Commission for cause, after the institution has been afforded due process. The institution's current accreditation phase and accreditation status are displayed on the institution's listing in the Institution Directory and in the Statement of Accreditation Status (SAS).

Name: Patricia Andrasik

Courses Taught (Four semesters prior to current visit)**:**

- Thesis Studio 1: Graduate Research Studio (ARPL 696A)
- Thesis Studio 2: Graduate Design Studio – Independent Study (ARPL 696C)
- Architectural Design III: Section 01 – Sustainable Urban Housing Studio (ARPL 302 / 502)
- Architectural Foundations III: Design Analysis & Synthesis (ARPL 201)
- Ethics + Stewardship (ARPL 383 / 783 & CEE 383)
- Environmental Design I (ARPL 232 / 532)
- Environmental Design II (ARPL 331 / 732)

Educational Credentials:

- Master of Architecture; University of Oklahoma; Norman, Oklahoma
- Fulbright Student Scholar; Slovenská technická univerzita v bratislave Fakulta architektúry, Slovak University of Technology; College of Architecture; Bratislava, Slovak Republic
- Bachelor of Science in Interior Design; La Roche College; Pittsburgh, Pennsylvania

Teaching Experience:

School of Architecture and Planning, The Catholic University of America - Washington, DC

Associate Professor (Present), Associate Dean of Undergraduate Studies (2018 – 2020); Assistant Professor (2012 – 2017); Adjunct Instructor(2005 – 2012);

Visiting Professor

2003 - School of Architecture and Engineering, Lebanese American University - Beirut, Lebanon

- Senior Architectural Studio (Arch 512), Interior Design Thesis (ID 412) Studio

Adjunct Instructor (as graduate student)

2000 – 2003 College of Architecture; University of Oklahoma - Norman, Oklahoma

- First Year Design Studio (End 1524), Second Year Design Studio (Arch 2534), Prague Urban Mapping Study Abroad (Arch 4236), Lighting Design (ID 3724) Human Factors of Design (End 2013)

Professional Experience:

Architect*
1998 – Present Professional experience as Licensed professional continues under categories of Service or Grants
- 2008– 2012 Fentress Architects – Washington, DC
- 2003 – 2008 Bignell Watkins Hasser Architects, PC – Annapolis, Maryland
- 2000 – 2003 Civil Engineering Corps, Naval Air Station, Navy Public Works Engineering; Pensacola, Florida
- 1998 – 2003 NASA Goddard Space Flight Center, Ogden Logistics / Code 200 – Greenbelt, Maryland

Licenses/Registration:
- Registered Architect in Washington DC License #ARC102987
- NCARB National Council of Architectural Registration Boards, Certificate #01479687
- NCIDQ National Council for Interior Design Qualification, Certificate #12429
- Autodesk© Building Performance Analysis Certificate
- LEED© BD+C Building Design and Construction; Accredited Professional #10052550
- LEED© O+M Operations and Maintenance; Accredited Professional #10052550

Selected Publications and Recent Research:
- Andrasik, P. , Lechner, N. *Plumbing Electricity Acoustics: Sustainable Design Strategies Towards Net Zero Design. 2nd ed.* New York, NY: Wiley, 2024.
- Andrasik, P. , Lechner, N. *Heating Cooling Lighting: Sustainable Design Strategies Towards Net Zero Design. 5th ed.* New York, NY: Wiley, 2021.
- Andrasik, P. *LEED Lab, A Model For Sustainable Education***.** New York, NY: Routledge 2021.

Professional Memberships:
- Society of Building Science Educators (SBSE) Member
- Built Environmental Education *Now (BEEnow)* International Non Profit Organization – Co-Founder and Chair
- American Institute of Architects (AIA) Member

**For brevity, this includes work as both a licensed architectural and interior design professional*

Julio Bermudez

Courses Taught:
ARPL 202 Architectural Design I (studio coordinator).
ARPL 601/701 Concentration Studio I and III (Sacred Space & Cultural Studies Concentration).
ARPL 618 Foundations of Sacred Space and Cultural Studies
ARPL 636 Design Process & Methods

Educational Credentials:
PhD. in Education, University of Minnesota, USA, 1994.
Master of Architecture, University of Minnesota, USA, 1990.
Diploma Architect. Universidad Católica de Santa Fe, Argentina, 1982.

Awards & Honors: *(selected)*
2021 ACSA Distinguished Professor.
2010 Sasada Award. Association for Computer-Aided Architectural Design Research in Asia (CAADRIA).
2006 ACADIA Award for Teaching Excellence. Association for Computer-Aided Design in Architecture.
2005 Premio Trayectoria Creativa Arturo Montagú. Iberoamerican Society of Digital Graphics (SIGraDi).
2004-05 ACSA Creative Achievement Award (w/J.Agutter). Association of Collegiate Schools of Architecture.

Teaching Experience:
Ordinary/Associate Professor (tenured), School of Architecture & Planning, Catholic University of America, 2010-now.
Associate/Assistant Professor (tenured), College of Architecture + Planning, University of Utah, 1993-2010.
Instructor, College of Design, University of Minnesota, 1987-1993.

Research Experience: *(selected, last 10 years)*
How Sacred Architecture Conveys Spiritual Understanding: A Biometric-Based Study. TRT Grant, current ($234K). PI
Cognitive-Aesthetic Effects of Sacred vs. Secular Architecture on Believers. TRT Grant, ($234K). PI.
fMRI Study of Architecturally Induced Contemplative States. CUA 2012 & U of Utah 2009 ($10,100). PI.

Patents:
Method and Apparatus for Monitoring Dynamic Cardiovascular Function Using … (# 7,413,546 B2, 2008).
Systems and Methods for Displaying and Querying Heterogeneous Sets of Data (# 7,593,013 B2, 2009).
Method and Apparatus for Monitoring Dynamic Systems Using N-Dimensional … (#7,603,631 B2, 2009).

Selected Publications: *(last 10 years, 8 selected out of 44)*
Bermudez, J. (Fall 2022) *Spirituality in Architectural Education*. Washington, DC: The CUA Press.
Bermudez, J. (2020) “Emplacing Spiritual Practices through Architecture,” *2A – Arch. and Art Magazine* 25: 70-75.
Bermudez, J. & Navarrete, S. (2019) “La Dimensión Espiritual de la Materia Arquitectónica. Reflexiones fenomenológicas sobre el Brutalismo." *Modulo Arquitectura CUC* 23, no.1: 89-120,
Bermudez J, et al. (2017) “Externally-induced meditative states: an exploratory fMRI study of architects' responses to contemplative architecture.” *Frontiers of Architectural Research* 6, no. 2: 123–136.
Bermudez, J. (2016) “Arguments for a Spiritual Urbanism.” *IN_BO* 9:104-115.
Barrie, T; Bermudez, J; and Tabb, P. (2015) *Architecture, Culture and Spirituality*. Ashgate Press, UK.
Bermudez, J. (2015) *Transcending Architecture. Contemporary Views on Sacred Space.* CUA Press.
Ro, B. & Bermudez, J. (2015) “Understanding Extraordinary Architectural Experiences through Content Analysis of Written Narratives”, *Enquiry* 12, no.1: 17-34

Professional Memberships:
American Institute of Architects (AIA), Association of Collegiate Schools of Architecture (ACSA), and Architecture, Culture, and Spirituality Forum (ACSF)

Service: *(selected)*
Co-founder, Executive Committee Member, and President*, Architecture, Culture & Spirituality Forum*, 2007-present
Director, Sacred Space and Cultural Studies Graduate Concentration. *CUArch,* 2010-present.
Executive board member, NeuroAesthetics Initiative, *Johns Hopkins University*, 2015-present
Co-founder & Director, Int’l Exchange between U of Utah and UNL, Argentina, *U of Utah*, 1995-2010.
Board Member, the *Journal of Architectural Education (JAE),* 2006-2009.

Name: Mark Ferguson

Courses Taught (Four semesters prior to current visit)**:** None

Educational Credentials: Master of Architecture, Princeton University, Princeton, New Jersey, 1982

Bachelor of Architecture, Carnegie-Mellon University, Pittsburgh, Pennsylvania, 1978

Teaching Experience: Rhode Island School of Design, Providence, Rhode Island; Co-Instructor, Fall fourth year Design Studio

University of Miami, Miami, Florida; Visiting Critic, Upper Level, Vernacular and Classical Architecture and Design, with Oscar Machado, Co-Instructor

Professional Experience: Ferguson & Shamamian Architects, L.L.P., New York, New York; Co Founder and Partner (1988-present); Parish-Hadley Associates, Inc., New York, New York; Project Architect;(1984-1988) Commissioned Work, Croton-on-Hudson, New York; Architect; (1983) Scofidio and Diller, New York, New York; Designer/Draftsman; (1980) Stubbins Associates, Cambridge, Massachusetts; Designer/Draftsman; (1982-1983) Dyer/Brown and Associates, Boston, Massachusetts; Designer/Draftsman;(1979) Ketterer, Schinhofen, Campbell Architects, Pittsburgh, Pennsylvania; Designer/Draftsman. (1977-1978)

Licenses/Registration: NCARB Certification

Colorado, Connecticut, Florida, Idaho, Illinois, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania

Selected Publications and Recent Research/Books:

New Traditional Architecture: Ferguson and Shamamian Architects, City and Country Residences, Mark Ferguson and Oscar Shamamian with Joseph Giovannini, Rizzoli 2011 The Parish-Hadley Tree of Life: An Intimate History of the Legendary ign Firm, Chapter by Mark Ferguson and Oscar Shamamian, Harry N. Abrams 2015

The Landscape Designs of Doyle Herman Design Associates, Foreword by Mark Ferguson, Images Publishing 2013

Contributor to several architectural and interior design survey books including: New York Splendor; Life at the Top; Classical Interiors; New Classicism; The New York Apartment Houses of Rosario Candela and James Carpenter; American Classicist; The ICAA Tenth Anniversary; and others.

Collaborations: Architecture, Interiors, Landscapes: Ferguson & Shamamian Architects. Author David Masello, Foreword by Margaret Russell, Rizzoli 2021

Professional Memberships: American Institute of Architects, Institute of Classical Architecture & Art (formerly the Institute for the Study of Classical Architecture); Founding Member. Director, National Board of the Institute of Classical Architecture & Art. Chair, National Board of the Institute of Classical Architecture & Art, Society of Architectural Historians, Association of Collegiate Schools of Architecture.

Name: Lavinia Fici Pasquina

Courses Taught (Four semesters prior to current visit)**:**

- **Spring 2021: ARPL 502** Architectural Design II (Studio), **ARPL 603** Concentration Studio II, **ARPL 696-A** Thesis Studio I (Studio)
- **Fall 2021: ARPL 696-B** Thesis Studio 2 (Studio) and **ARPL 407/507**, Design Build (Lecture)
- **Spring 2022: ARPL 302,** Architectural Design III (Studio) and **ARPL 603-Rome** section Concentration Studio II
- **Fall 2022: ARPL 401**, Architectural Design IV (Studio), **ARPL 439/539** Topics in Constr/Enviro (Lecture)

Educational Credentials:

Dec 1998	**Masters of Architecture,** The Catholic University of America, Washington D.C.
March 1996	**Masters of Architecture** with Industrial and Interior Design sub-concentration, University of Palermo, School of Architecture, Palermo, Italy
July 1990	**Diploma of Humanities and Classical Studies**," Liceo Classico G. Meli", Palermo, Italy

Teaching Experience: Since joining the faculty at CUArch, Ms. Fici Pasquina has instructed a variety of undergraduate and graduate architectural design studios and courses, ranging from introductory classes in basic design principles and drawing to advanced studios in computer 3D modeling, animation and movie making. Several of her studios have involved sponsored trips for students to design projects at remote sites with diverse themes, including a "High End Casino" in Las Vegas, "Data Center" in San Francisco, "Aging-in -Place" developments in Maryland, "contemporary Fish Market, Marina", and "Wine Museums" in southern Italy. She also co-taught two semesters and led one expedition with Adjunct Prof Travis Price in "Spirit of Place, Spirit of Design", where students design and built contemplative spaces translating vernacular architecture into modern ideals. Her project gained several publications, citation in books and the interest of independent filmmakers.

Professional Experience: Lavinia remains active professionally, both in Italy and in the United States. Her experience has ranged from working in large firms (such as URS-GREINER), focusing on large-scale government and commercial buildings to small private firm (such as Faulkner and Partners), working on residential projects. In 2008, she started her own small boutique design studio, "Xhabition", specializing in custom-built residential spaces. Her designs have been published in such magazines as *Spaces, Metropolitan Home, Elle Décor, Abitare*, as well as in books such as *Glamour* and *The Modern Residence*. She has also been featured on two episodes of the television show, Garage take-over, aired nation-wide by Discovery Channel. Her projects often merge creative design and sustainability weather they are interior objects, jewelry, or architectural spaces. Her European background, extensive study, and appreciation of the history and the emotional side of architecture, help to stimulate students to appreciate and develop not only their own personal unique styles but to better understand of where their design projects may fit within the context of the global continuum.

Licenses/Registration: Licensed and Registered, Italy, 1996.
Professional Memberships: -Member of the Architecture Society: TAU DELTA SIGMA
-Ordine degli Architetti di Palermo, Italy

Selected Publications and Recent Research:

Aug 2020/Current	**Book writing:** *"On Wine and Architecture", two forms of human expression,* ***In Progress***
Aug 2020/Current	**Awarded Grant:** US $100,000 for **Research on Transportation Centers** issued by the **US Department of Transportation. Grant in conjunction between CUA, Pitt, and** USU-HS Universities
May 2020	**Publication** of "Farmhouse" within the book: *the* ***Modern Residence****, Inspired modern homes imagined and designed by the Nation's leading Architects*. Project in conjunction with John Nahra
May 2019	Presented own Students' work at the **Exhibit "Back-to-Italy"** at the Italian Embassy in Washington DC
Aug 2018	**Publication/Article**: *"Daughter of the Wind", an architecture professor shares her love of a remote Mediterranean island with her students, challenging them to design public spaces that reflect a unique culture and history*. Article within **CUA Magazine**
October 2018	Received by the Major and the Representative of the Island of Pantelleria, Italy a **$10,000 Scholarship** for CUA students for excellence in their design project

Name: C.J. Howard

Courses Taught (Four semesters prior to current visit)**:** ARPL 102 Architectural Foundations II: Design Tools, ARPL 241 Theory of the Orderer, ARPL 301 Architectural Design II, ARPL 560 Classical Architecture Illustrated, ARPL 402 Integrated Building Design Studio, ARPL 432 Integrated Studio Supplement, ARPL 502/603 Architectural Design II & Concentration Studio II – Design Tools

Educational Credentials:

The University of Notre Dame – Notre Dame, IN
Masters of Architectural Design and Urbanism, May 2010
The University of Notre Dame – Notre Dame, IN
Bachelor of Architecture, May 2000

Teaching Experience:

Catholic University of America, Assistant Professor, Full Time Faculty/Tenured Track (August 2017 – Present)
Catholic University of America, Adjunct Professor (Classical Concentration)
Third Year Studio (Spring 2016)
University of Notre Dame School of Architecture, Teaching Assistant
Design Studio, Building Technology, and Advanced Structures (August 2009 – May 2010)

Professional Experience:
C.J. Howard Architecture, Alexandria, VA, August 2017 – Present
McCrery Architects; Project Architect, Washington, DC, May 2010 – July 2017
David Mayernik Ltd.; Architect, South Bend, IN, June 2009 – August 2009
James Childs Architect; Architect, South Bend, IN, June 2009 – August 2009

Licenses/Registration:

Registered Architect in the Commonwealth of Virginia – September 2008 to Present
Registered Architect in the State of Maryland – April 2021 to Present
Certified by the National Council of Architectural Registration Boards – NCARB

Professional Memberships:

Institute for Classical Architecture & Classical America
National Civic Art Society – Build DC/Anacostia Riverfront Design Team
National Council of Architecture Registration Boards
Congress for New Urbanism

Selected Publications and Recent Research:

[Article] *The Value of Wisdom through Experience* – Sustainable Heritage. WIT Press, Volume 191 – Fall 2019. [Article] *The Throne of Paris*. Sacred Architecture, Volume 36 – Fall 2019.[Research] Winner, Leicester B. Holland Prize sponsored by National Park Service and Library of Congress. [Research - Pedagocical Documents]Historic documentation and single sheet presentation drawing for the Athenaeum building in Alexandria, Virginia, 2019. (Solo entry) [Pedagogical Creative Works] Historic House, Church & Chapel renovation projects described under Professional work by CJ Howard Architecture LLC.

Associate Professor James C. McCrery, II, A.I.A, NCARB

Courses Taught:

Spring 2022	ARPL 402 /602	ARPL 696 Thesis I	ARPL 696 Thesis II
Fall 2021	ARPL 636	ARPL 696 Thesis I	ARPL 696 Thesis II
Spring 2021	ARPL 402 / 602	ARPL 434/634	ARPL 696 Thesis I
Fall 2020	ARPL 501/601	ARPL 636	ARPL 696 Thesis II

Educational Credentials:

Master of Architecture
The Ohio State University. Columbus, Ohio. May 1993.
Bachelor of Science in Architecture
The Ohio State University. Columbus, Ohio. December, 1989.

Teaching Experience:

Appointment with Continuous Tenure - The Catholic University of America – August 2020.
Promoted Associate Professor - The Catholic University of America – August 2020.
Appointed Assistant Professor - The Catholic University of America – August 2016

Professional Experience:

McCrery Architects, PLLC. Washington, DC. January 2007 to present.
Principal, Founder, and President of the Corporation.
Franck Lohsen McCrery, Architects, LLC. Washington, DC. October 2000 to December 2006.
Founder and Principal. President of the Corporation.
Neumann Lewis Buchanan Architects. Washington, DC. November 1998 to June 2000.
Project Designer and Project Architect.
Mary Douglas Drysdale Interior Design, Washington, DC. May 1998 to November 1998.
Project Designer and Project Architect.
Allan Greenberg Architect, Washington, DC. April 1992 to May 1998.
Project Designer and Project Architect.
Eisenman Architects, P.C., New York, NY. January 1991 to December 1991.
Project Designer

Licenses/Registration:

Registered Architect. Original licensure in the Commonwealth of Virginia. September 18, 1998.
Licensure by reciprocity in the following states: AL, AR, CO, CT, DC, GA, ID, IL, IO, KS, MD, MI, MN, NC, OH, OK, PA, SC, TN, TX. Registered Architect Victoria Province, Australia; and Tasmania Province, Australia

Selected Built Woks:

St. Mary of Sorrows Church, Fairfax, VA; Corpus Christi Church, Aldi, VA; Cathedral of the Sacred Heart, Knoxville, TN; Newman Center and Chapel, Lincoln, NE; St Mary Help of Christians Church, Aiken, SC.

Professional Memberships:

American Institute of Architects; NCARB; Institute of Classical Art & Architecture; National Civic Art Society; US Supreme Court Historical Society; Nat'l Design Peer – GSA; US Commission of Fine Arts - Commissioner.

Name: Jason A. Montgomery

Courses Taught:

ARPL 696 Thesis II Design Fall 2022

Educational Credentials:

The Association of College and University Educators and the American Council on Education. *Certificate in Effective College Instruction*, April 2021.

University Of Wales at Cardiff. *Master of the Arts in Architecture*, December 1997.

Prince Of Wales's Institute of Architecture. *Diploma in Architecture*, July 1996.

University Of Notre Dame. *Bachelor of Architecture*, *Concentration in Structural Engineering*, May 1992.

Teaching Experience:

New York City College of Technology, City University of New York, Brooklyn, New York. *Associate Professor,* August 2020 – present, *Assistant Professor,* September 2009 – August 2020.

Graduate Center, City University of New York, Manhattan, New York. *Futures Fellow, Adjunct Associate Professor,* January 2021 – June 2021.

Yale School of Architecture, New Haven, Connecticut. *Critic,* September 2003 – December 2003.

University of Notre Dame Rome Studies Program, Rome, Italy. *Visiting Assistant Professor, Director of Third Year Design Studio, Graduate Studio Critic,* September 1997 – June 1999.

Andrews University, Berrion Springs, Michigan. *Adjunct Assistant Professor, Third Year Studio Critic,* February 1993 – June 1993.

Professional Experience:

Truong Montgomery Architect. Manhattan, New York. *Principal,* January 2010 – Present.

Hart Howerton. Manhattan, New York. *Principal,* June 2004 – June 2009. *Consultant,* June 2009 – 2012.

Cooper Robertson And Partners. Manhattan, New York. *Project Architect,* June 1999 – May 2004.

Porphyrios Associates. London, England. *Project Architect,* October 1994 – August 1997

Licenses/Registration:

New York, 2009 – present, South Carolina, 2017 – 2019, Pennsylvania, 2013 – 2015.

Selected Publications and Recent Research:

Montgomery, Jason. 2022. "The Archeology of Brooklyn City Hall Square: Seeking Insights for Re-establishing Social and Civic Infrastructure in Meaningful Places in the American City." Paper presented at *(In)Tangible Heritage(s).* University of Kent. Canterbury, England.

Cities in a Changing World: Questions of Culture, Climate and Design. A Conference on Architecture, Urbanism, Planning, Sociology, Health, Environments, Media, Infrastructure and Economies. 2021. Academic Conference co-organized by Jason A. Montgomery and AMPS. New York City College of Technology, City University of New York. Brooklyn, New York.

Montgomery, Jason. 2020. "Combating Urban Stratification: Building Fresh Strategies for Integrative Symbiotic Urban Interventions." Paper presented at *The City and Complexity – Life, Design and Commerce in the Built Environment.* City, University of London. London, England.

Professional Memberships: Congress for New Urbanism. *Board Member*, CNU NYC 2021-present. *Member, 2019* – present.

Name: Adnan Z Morshed, PhD

Courses Taught (Four semesters prior to current visit)**: ARPL 211/511 History I, ARPL 311/611 History III, ARPL 314/514 Architectural Theory, ARPL 696A, B Thesis I, and ARPL 696C, D, Thesis II**

Educational Credentials: 2002 PhD in Architecture and Architectural History, Theory, and Criticism (MIT), 1995 SMArchS (MIT), 2004 Postdoc (Smithsonian Institution)

Teaching Experience: Catholic University of America, Washington, DC, 2004-present; Bangladesh University of Engineering and Technology, 1991-1993; MIT, 1995-1998; BRAC University, 2017-2018

Professional Experience: Selected design work - Principal architect, BRAC regional offices at eight rural locations in Bangladesh (https://www.bracu.ac.bd/academics/centres-and-initiatives/centre-inclusive-architecture-and-urbanism-ciau/projects/brac); Principal Architect, Residential House, Greensboro, North Carolina; Principal architect, Interior design for Central Cafeteria, Library, and Canteen, Residential Semester Campus of BRAC University at Savar, Dhaka; Principal Architect, BRAC University Department of Architecture Design Team for the "Historic Preservation and Landscape Design of the Old Dhaka Central Jail and Redevelopment of Its Surrounding Area," National Design Competition, May – Oct. 2017, (honorable mention); Principal Architect, Bangladesh House (Official Residence of the Bangladesh Ambassador to the US), Bethesda, Maryland, USA (2015-2017) (unbuilt)

Licenses/Registration: Registered architect in Bangladesh; preparing for architectural licensure in the USA

Selected Publications and Recent Research: Adnan Morshed, *Impossible Heights: Skyscrapers, Flight, and the Master Builder* (University of Minnesota Press, 2015). http://www.upress.umn.edu/book-division/books/impossible-heights (Reviewed in *The Journal of American History; Journal of American Studies; Journal of Urban History; Science Fiction Studies; Choice; Reviews in American History; The Chronicle of Higher Education*); Adnan Morshed, *DAC, Dhaka: An Architectural Guidebook* (Altrim Publishers, Barcelona, Dec. 2017); Selected recent articles of Adnan Morshed - "The Paradox of Invisibility: Microhistory as Knowledge Justice," *Journal of Architectural Education* (Fall 2022); "Mysteriously Handcuffed to History," *Places Journal* (https://placesjournal.org/), (June, 2022); "De-Centering Rome: A Pedagogy of Global Architectural History," *Journal of Architectural Education* (Sept., 2020); "Modernism as Post-Nationalist Politics: Muzharul Islam's Faculty of Fine Arts (1953–56)," *Journal of the Society of Architectural Historians*, Vol. 76, No. 4, (Dec. 2017); "The Politics of Self-Help: Women Owner-Builders of Grameen Houses in Rural Bangladesh" *Traditional Dwellings and Settlements Review*, UC Berkeley (Spring 2016); Ongoing research: urban poverty and spatial imagination (edited book); Louis Kahn's Mediterranean travels during the 1950s and influence on his architecture (article).

Professional Memberships: Society of Architectural Historians (SAH), Association of Collegiate Schools of Architecture (ACSA); American Studies Association (ASA); College Art Association (CAA), American Institute of Architects (AIA)

Tonya Ohnstad AIA, NCARB, MNAL

Courses Taught:

ARPL 101 Introduction to the Built Environment
ARPL 102 Design Tools
ARPL 301 Architectural Design Studio 1
ARPL 402 Integrated Building Design Studio
ARPL 601/701 Graduate Design Studio
ARPL 696 Thesis II
ARPL 333/633 Construction 1
ARPL 500 Introduction to Design and Graphics

Educational Credentials:

Master of Architecture, Harvard University Graduate School of Design, USA, 2005.
Bachelor of Arts Majors in Architecture and French, summa cum laude, University of Minnesota, USA, 2000

Teaching/Professional Experience:

Assistant Professor of Practice, School of Architecture & Planning, Catholic University of America, 2021-current
Visiting Assistant Professor, School of Architecture & Planning, Catholic University of America, 2019-2021
Adjunct Lecturer School of Architecture & Planning, Catholic University of America, 2015-2019
Adjunct Lecturer University of Maryland: School of Architecture, Planning and Preservation, 2015-2019
Adjunct Lecturer Northeastern University, Architecture Department, Boston, 2008, 2009
Co-founder, Rhetra LLC Washington, DC, 2016 - 2020
Founding Principal, OdA: Ohnstad Design & Architecture Horten, Norway, 2010 - 2020
Sivilarkitekt, NSW Oslo, Norway, 2010 - 2011
Sivilarkitekt , SPIR Arkitektur, Tønsberg Norway 2010
Designer, Kennedy & Violich Architecture Boston, MA 2004, 2006 - 8
Jr. Architect, Frank O. Gehry Architects Los Angeles, CA, 2005 - 2006
Design Studio Instructor Harvard Graduate School of Design, Career Discovery Cambridge, MA, 2004, 2005
Designer Ateliers Jean Nouvel Paris, France, 2003
Architect Intern I Ohnstad Architects Sioux Falls, SD, 1995 - 2000

Selected Exhibitions/Publications:

THE GATE MUSEUM : (re)CONSTRUCTION: The Joinery and Craft of Notre Dame de Paris Truss #6 The Gate Museum Exhibition, March 5-April 28 2022
NATIONAL BUILDING MUSEUM: Notre-Dame Paris Truss #6 with student work. August-September 2021
SEE/SAW, UMD, Rhetra Project, Kakenya Center for Excellence, 2018

Service: (selected)

School: Associate Dean of Graduate Studies 2020-current
School: Study Abroad, Director Rome 2019-current
School: Director Experiences in Architecture summer High School immersion 2017-current
Professional: NCARB 5.0 Forms and Assembly Subcommittee: Programming & Analysis, 2021-2022
Professional: Board of Advisors, Handshouse Studio 2021-current
University: Diversity Equity and Inclusion Committee Coalition of the Willing 2022-current
University: Academic Senate 2021-current
University: Graduate Board 2020-current

Randall Ott, AIA

Courses Taught (Two academic years prior to current visit):
ARPL 401 Architectural Design IV

Educational Credentials:
BS Arch., University of Michigan, 1980
MArch., Yale Universitv, 1984

Teaching and Administrative Experience:
Dean, School of Architecture and Planning, The Catholic University of America, Aug 2003 to 2020
Associate Dean, College of Architecture and Planning, University of Colorado (Denver and Boulder), Dec 2000 to July 2003
Associate Chair and Director of Undergraduate Studies, Dept of Architecture, University of Colorado (Boulder), January 1997 to December 2000
Professor, The Catholic University of America, Fall 2003 to Present
Associate Professor with Tenure, University of Colorado, Fall 1996 to Winter 2003

Professional Experience:
Mitchell/Giurgola, New York City, April 1989 to January 1991
Paul Segal Associates, New York City, September 1985 to May 1989
Randall Ott Architect, New York City, November 1986 to August 1989

Licenses/Registration:
Registered Architect, New York State, 1986 to Present

Selected Publications, Awards and Recent Research:

ACSA Faculty Design Award, Association of Collegiate Schools of Architecture, 2002: “Salt Chapel”

ACSA Faculty Design Award, Association of Collegiate Schools of Architecture, 2001: “Pine Chapel”

ACSA Faculty Design Award, Association of Collegiate Schools of Architecture, 1996: “Columbarium Chapel”

“Salt Chapel,” *JAE* (Journal of Arch. Education, February 2004).

“Wind Chapel,” *JAE* (Journal of Arch. Education, Vol. 52, No. 4, May, 1999), pp. 226-232.

“Surface vs. Structure: Alvar Aalto and the Finnish Wooden Churches,” *Cultures of Silence* (Texas A & M University Press, 1998), pp. 95-118. Peer Reviewed

“Berlin,” [3000 words] *Encyclopedia of Twentieth Century Architecture,* Fitzroy: 2004

“German Pavilion,” [1000 words] *Encyclopedia of Twentieth Century Architecture,* Fitzroy: 2004

“Hannes Meyer,” [1000 words] *Encyclopedia of Twentieth Century Architecture,* Fitzroy: 2004

“Mies in Berlin," and “Mies in America,” *JAE* (Journal of Arch. Education, Vol. 56, No. 4, May, 2003), pp. 69-71

Professional Memberships:
The American Institute of Architects

Name: ANA MARIA ROMAN ANDRINO

Courses Taught (Four semesters prior to current visit)**:**

Summer 2022 – ARPL 500

Spring 2022 – ARPL 202, ARPL 419/519 Theory of Urban From. From Babylon to the Eco-City

Fall 2021 – ARPL 501

Summer 2021 – ARPL 500, ARPL 419/519 Theory of Urban From. From Babylon to the Eco-City

Educational Credentials: M.Arch (CUA 2014), M.S.Arch (UPenn 2016), M.T.S.(John Paul II Institute 2017), BSArch (Universidad de Salamanca 2000) MArch (Universidad Politécnica de Madrid 2011), PhD candidate (UPenn 2018-current)

Teaching Experience:

Instructor at Catholic University of America, School of Design for APRL501 Architectural Design I (Fall 2021). **Instructor** at Catholic University of America, School of Design for APRL500 Introduction to Design and Design (Summer 2021). *Own syllabus developed.*
Instructor at Catholic University of America, School of Design for APRL519 Special Topics in History/Theory (Summer 2021, Spring 2022). *Own syllabus developed.*
Instructor at Catholic University of America, School of Design for APRL383/783 Ethics and Stewardship (Fall 2020, Spring 2021).
Instructor at Catholic University of America, School of Design for APRL102 Design Tools (Spring 2019, Spring 2020). **Instructor** at Catholic University of America, School of Design for APRL201 Undergraduate Studio (Summer 2017, Summer 2018, Summer 2019, Fall 2019, Summer 2020, Fall 2020). *Own syllabus developed.*
Instructor at Catholic University of America, School of Design for APRL202 Undergraduate Studio (substitution March-April 2017, Summer 2017_ *Own syllabus developed*, Summer 2018_ *Own syllabus developed*, Summer 2019 *Own syllabus developed*, Spring 2020, Summer 2020_ *Own syllabus developed,* Spring 2022).
Instructor at Catholic University of America, School of Design for APRL301 Undergraduate Studio (Fall 2019).
Instructor at Catholic University of America, School of Design for APRL302 Undergraduate Studio (Spring 2019). **Instructor** at Catholic University of America, School of Design, for ARPL401: Walton Studio in "Cultural Studies and Sacred Space", concentration directed by Prof. Julio Bermudez (Fall 2016).
Part-time work at KRUHLY ARCHITECTS, helping with drafting residential projects (February-June 2016).
Teaching Assistant at the University of Pennsylvania, School of Design for Arch 611: Contemporary Architectural Theory (taught by Prof. Daniela Frabricius, Fall 2015, and by Prof. Daniel Barber, Spring 2016).

Professional Experience:

Court Expert as Architectural Technician at the Tribunal Superior de Justicia of Murcia. (December 2001 – September 2004).
Real Estate Appraiser at Tecnitasa, S.A. (May 2000 – November 2001).
Design Project for a small restaurant in the town center of Salamanca (Spain) (February 2001).

Licenses/Registration: ---

Selected Publications and Recent Research: ---

Professional Memberships: ---

Name: Nathaniel Robert Walker, PhD

Courses Taught (Four semesters prior to current visit)**:**

(all four prior semesters were in the Art & Architectural History Department at the College of Charleston)
Spring 2022: ARTH 490 Senior Seminar: The Architecture of Utopia / ARTH 335: American Architecture
Fall 2021: ARTH 396 The Architecture of Memory: Museums, Monuments, and Memorials / ARTH 265 The City as a Work of Art Spring 2021: Sabbatical (I consequently provide one additional semester below)
Fall 2020: ARTH 294 City and Cinema / ARTH 265 The City as a Work of Art Spring 2020: ARTH 394 Eighteenth and Nineteenth Century Architecture / ARTH 335: American Architecture

Educational Credentials:

PhD in the History of Art & Architecture, Brown University, 2008-2014 / MA in Architectural History, Savannah College of Art & Design, 2004-2006 / BA in History, Belmont University, 1996-2000

Teaching Experience:

Associate Professor of Architectural History, College of Charleston, 2020-2022
Assistant Professor of Architectural History, College of Charleston, 2014-2020
Adjunct Professor in the History of Art & Visual Culture, Rhode Island School of Design, 2010-2014
Teaching Fellow at Brown University, 2014
Teaching Assistant at Brown University, 2008-2014

Professional Experience:

Draughtsperson, Mitchell/Matthews Architects + Planners, 2006-2008

Licenses/Registration:

N/A

Selected Publications and Recent Research:

Monograph: *Victorian Visions of Suburban Utopia: Abandoning Babylon* (Oxford University Press: 2020). Edited Volume: Co-editor with Elizabeth Darling, Reader in Architectural History at Oxford Brookes University, *Suffragette City: Women, Politics, and the Built Environment* (Abingdon: Routledge, 2019). Also authored the chapter, “Life and Breath to the City: Women, Urbanism, and the Birth of the Historic Preservation Movement,” pp. 57-84. Peer-Reviewed Journal Articles: “Classicisms of Color: Transatlantic Exchanges in African and American Traditional Architecture,” *Journal of Traditional Building, Architecture and Urbanism*, no. 2 (2021), pp. 437-451. “American Crossroads: General Motors’ Midcentury Campaign to Promote Modernist Urban Design in Hometown U.S.A.,” *Buildings & Landscapes: The Journal of the Vernacular Architecture Forum*, vol. 23, no. 2 (Fall 2016), pp. 89-115. Peer-Reviewed Book Chapter: “Designing the Diaspora: Expressing African Heritage in Historic Charleston,” book chapter in Giuseppe Faldi, Axel Fisher, and Luisa Moretto, editors, *African Cities Through Local Eyes: Experiments in Place-Based Planning and Design* (Berlin: Springer, 2021), 71–89.

Professional Memberships:
Society of Architectural Historians; Southeast Chapter of the Society of Architectural Historians; Urban History Association

PROGRAM AND STUDENT CRITERIA MATRIX

Master of Architecture 2

		BS.Arch COURSES																						M.Arch COURSES									
		Fall											Spring											Year 1				Year 2					
		Fall											Spring											Fall				Fall					
	Preparatory Education	*Architectural Foundations I: Intro to Architecture*	*History of Architecture 1*	*Pre-Design*	*Theory of the Orders*	*Architectural Design 2*	*History of Architecture 3*	*Environmental Design 2*	*Construction 1*	*Ethics + Stewardship****	*Architectural Design 4*	*Structures 1*	*Architectural Foundations II: Design Tools*	*Architectural Design 1*	*History of Architecture 2*	*Environmental Design 1*	*Architectural Design 3*	*Introduction to Architectural Theory*	*Integrated Bldg. Design Studio (IBDS)*	*Integrated Studio Supplement (ISS)*	*Construction 2*	*Structures 2*	*Concentration Studio*	*Design Process and Methods*	*Concentration Studio*	*Advanced Structures*	*Thesis 1*	*Concentration Studio III*	*Thesis 2*	*Professional Practice*				
	ARPL101	***ARPL211***	***ARPL 221***	***ARPL241***	***ARPL301***	***ARPL311***	***ARPL331***	***ARPL333***	***ARPL383***	***ARPL401***	***ARPL441***	***ARPL 102***	***ARPL202***	***ARPL212***	***ARPL232***	***ARPL302***	***ARPL314***	***ARPL402/602***	***ARPL432/632***	***ARPL434***	***ARPL442***	***ARPL601***	***ARPL636***	***ARPL603***	***ARPL742***	***ARPL696A,C***	***ARPL701***	***ARPL696B,D***	***ARPL 722***				
Shared Values																																	
Design																																	
Env. Stewardship & Professional Respon.																																	
Equity, Diversity & Inclusion																																	
Knowledge & Innovation																																	
Leadership, Collab. & Community Engmt.																																	
Lifelong Learning																																	
Program Criteria																																	
PC.1 Career Paths		x																	x									x				
PC.2 Design					x					x			x			x		x				x		x			x	x				
PC.3 Ecological Know. & Respon.				x					x						x			x														
PC.4 History & Theory		x	x		x		x							x			x						x				x					
PC.5 Research & Innovation					x												x	x	x				x				x					
PC.6 Leadership & Collaboration																		x														
PC.7 Learning & Teaching Culture		x	x							x						x		x					x				x					
PC.8 Social Equity & Inclusion		x				x	x			x					x			x							x			x				
Student Criteria																																	
SC.1 HSW in the Built Environ.				x							x							x			x				x				x			
SC.2 Professional Practice				x					x									x	x										x			
SC.3 Regulatory Context				x			x								x			x	x													
SC.4 Technical Knowledge							x	x			x				x			x	x	x	x				x							
SC.5 Design Synthesis																		x	x													
SC.6 Building Integration																		x	x													

PROGRAM AND STUDENT CRITERIA MATRIX

Master of Architecture 3

	Preparatory Education	M.Arch COURSES																												
		Year 1													Year 2							Year 3								
		Summer			Fall						Spring				Fall					Spring			Fall				Spring			
		Introduction to Design and Graphics	*Structures 1*		*Architectural Design 1*	*History of Architecture 1*	*Construction 1*	*Theory of the Orders*	*Ethics + Stewardship*		*Architectural Design 2*	*History of Architecture 2*	*Environmental Design 1*	*Structures 2*	*Construction 2*	*Predesign*	*Concentration Studio*	*History of Architecture 3*	*Environmental Design 2*		*Introduction to Archite Theory*	*Integrated Building Design Studio*	*IBDS Supplement*	*Design Process and Methods*	*Thesis Studio 1*	*Concentration Studio*		*Thesis Studio 2*	*Professional Practice*	*Advanced Structures*
		ARPL500*	***ARPL 541***		***ARPL501****	***ARPL511***	***ARPL633***	***ARPL641***	***ARPL783***		***ARPL502****	***ARPL512***	***ARPL532***	***ARPL542***	***ARPL634***	***ARPL521***	***ARPL601***	***ARPL611***	***ARPL731***		***ARPL514***	***ARPL602***	***ARPL632***	***ARPL636***	***ARPL696A,C***	***ARPL701***		***ARPL696B,D***	***ARPL722***	***ARPL742***
Shared Values																														
Design																														
Env. Stewardship & Professional Respon.																														
Equity, Diversity & Inclusion																														
Knowledge & Innovation																														
Leadership, Collab. & Community Engmt.																														
Lifelong Learning																														
Program Criteria																														
PC.1 Career Paths		x																			x						x		
PC.2 Design					x						x						x									x		x		
PC.3 Ecological Know. & Respon.									x				x			x						x								
PC.4 History & Theory		x				x		x				x							x		x			x	x					
PC.5 Research & Innovation								x													x	x	x	x	x		x			
PC.6 Leadership & Collaboration																						x						x		
PC.7 Learning & Teaching Culture		x				x					x											x			x		x			
PC.8 Social Equity & Inclusion		x							x		x	x							x		x				x					
Student Criteria																														
SC.1 HSW in the Built Environ.			x											x		x						x						x	x	
SC.2 Professional Practice									x							x						x	x					x		
SC.3 Regulatory Context													x			x			x			x	x							
SC.4 Technical Knowledge			x				x						x	x	x				x			x	x							x
SC.5 Design Synthesis																						x	x							
SC.6 Building Integration																						x	x							

*In the MArch3 degree matrix shown above, the following courses are equivalent to the following BSArch+MArch2 degree matrix course numbers: ARPL500 = ARPL101, ARPL102 and ARPL 201; ARPL501 = ARPL202 and ARPL301; ARPL502 = ARPL302, ARPL401 and ARPL603.