

# Virginia Polytecnic Institute and State University School of Architecture + Design

# 2018 Visiting Team Report

**B. Arch.** [160 undergraduate credit hours]

M. Arch.

M. Arch. 2 [preprofessional degree plus 54 graduate credit hours]

M. Arch. 3 [non-preprofessional degree plus 84 graduate credit hours]

The National Architectural Accrediting Board March 10-14, 2018

**Vision:** The NAAB aspires to be the leader in establishing educational quality assurance standards to enhance the value, relevance, and effectiveness of the architectural profession.

**Mission:** The NAAB develops and maintains a system of accreditation in professional architecture education that is responsive to the needs of society and allows institutions with varying resources and circumstances to evolve according to their individual needs.

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### I. Summary of Visit

# a. Acknowledgments and Observations

The visiting team would like to thank the school administration for the well organized and complete preparation of materials for this accreditation review.

We were impressed by the enthusiasm of students and the dedication of the faculty. The school's studio structure that allows a mix of students within the physical space across degree programs and years presents an ideal model for professional mentoring that has an impact well into the professional years. All constituents in the program consistently understand the program's core values. An open, accessible, and respectful environment and broad appreciation for each other's talents, opinions, and contributions have led to a unique culture in the school. It is clear that students learn to think and communicate precisely.

The web of opportunities for all students provides a rich environment for teaching and learning. This is especially apparent in student access to equipment that encourages creative production and opportunities for study in a range of locations—Blacksburg, Chicago, the WAAC, and Riva San Vitale—in addition to the travelling study abroad and international exchange options.

All of the materials for the accreditation visit were accessible in digital format and well organized. The team room was set up for ease of access. Supplemental materials were all available by hyperlinks.

The numerous applied research projects have a positive impact on the school. Research projects include graduate and undergraduate student participation. Small research grants for students are a positive force in encouraging students to engage in self-initiated design exploration.

We observe the strength of the school and its consistent mission for education and research over its history. The college and school have been guided by an ongoing strategic plan. The school has the well-informed support of the interim provost, Dr. Cyril Clarke, and the recent arrival of the new dean, Dr. Richard Blythe, is well timed and will have a positive impact on growth of the school both physically and intellectually. The excellent work of students and faculty, will benefit from Dr. Blythe's interest in engaging in a dialog within the school, college and university expanding this dialog within a global context.

Special thanks is given to Director Hunter Pittman and Assistant Director Hilary Bryon. Their leadership and preparation, leading up to and during this visit, has allowed us to do our work in an efficient and effective manner.

- b. Conditions Not Achieved
- B.2 Site Design (M. Arch)
- B.3 Codes and Regulations (M. Arch.)
- C.3 Integrative Design (M. Arch.)

# II. Progress Since the Previous Site Visit

**2009 Student Performance Criterion A.9, Historical Traditions and Global Culture:** *Understanding* of parallel and divergent canons and traditions of architecture, landscape and

urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.

**Previous Team Report (2012):** B. Arch–Evidence of student understanding was found in the History of Architecture (ARCH 3115), as well as in the ARCH 4034 Building Cities course work. See comments for causes of concern.

M. Arch–Evidence of student understanding in historical traditions and global culture was **not found** in Qualifying Design Seminar (ARCH 4705-4706).

**2018 Visiting Team Assessment**: M. Arch: **MET** – the 2012 A.9 Historical Traditions and Global Culture is now included as part of A.7 History and Culture. There is evidence of historical traditions and global culture in the two sequential sections of ARCH 5134.

**2009 Student Performance Criterion B.1, Pre-Design:** *Ability* to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.

**Previous Team Report (2012):** B. Arch-3015-16, Only a few projects exhibited comprehensive programs; **NO** code or zoning reviews were observed.

M. Arch–In ARCH 5755, only a few projects exhibited comprehensive programs; **NO** code or zoning reviews were observed.

**2018 Visiting Team Assessment**: B. Arch.: **MET** – evidence of student achievement at the prescribed level for this criterion was found in ARCH 4015 and 4016 Architecture IV Integrative Design.

M. Arch.: **MET** – evidence of student achievement at the prescribed level for this criterion was found in Arch 5755 and Arch 5756 Advanced Design Laboratory.

**2009 Student Performance Criterion B.2, Accessibility:** *Ability* to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

**Previous Team Report (2012):** B. Arch–Evidence of student ability to design with accessible facilities was found in Architecture III (ARCH 3015/3016). Refer to Realm B Summary.

M. Arch–There was not sufficient evidence of student ability to design with accessible facilities. Evidence of ramps for accessibility was found in some projects. In most projects, ramps or other indicators of providing accessibility for handicapped were difficult to find.

**2018 Visiting Team Assessment**: The 2009 Criterion B.2, Accessibility is now included as a part of 2014 Criterion B.3, Codes and Regulations.

B. Arch.: **MET** - the criterion was met through course work in ARCH 4015 and 4016 Architecture IV Integrative Design.

M. Arch.: **NOT MET** – evidence of student achievement at the prescribed level for this criterion was not consistently found in Arch 5755 and Arch 5756 Advanced Design Laboratory.

**2009 Student Performance Criterion B.6, Comprehensive Design:** *Ability* to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:

A.2. Design	Thinking Skills	B.2. Accessibility

A.4. Technical Documentation B.3. Sustainability

A.5. Investigative Skills B.4. Site Design

A.8. Ordering Systems B.5. Life Safety

A.9 Historical Traditions and Global

Culture

B.7 Environmental Systems

B.9. Structural Systems

**Previous Team Report (2012):** B. Arch–Arch 3015-16- Only a limited number of projects were able to integrate the necessary SPCs thoroughly in one project, <u>as was the case in the 2006 visit</u>. The team had <u>great difficulty</u> finding all the required SPCs in most projects across the board, and felt the work was not consistently in conformance with the requirements of this SPC.

M. Arch-Evidence was found in ARCH 5994.

**2018 Visiting Team Assessment**: The 2009 B.6, Comprehensive Design has been replaced by Realm C.

B. Arch.: C.1, Research, C.2, Integrated Evaluation and Decision-Making, and C. 3, Integrative Design, are **MET** in student projects in the B. Arch. in ARCH 4015 and 4016 Architecture IV Integrative Design and ARCH 3015 and 3016 Architecture III.

M. Arch.: C.1, Research, and C.2, Integrated Evaluation and Decision-Making, are **MET** in student projects in the M. Arch. in ARCH 5755, 5756 Advanced Design Lab. C.3, Integrative Design is **NOT MET** in the M. Arch. Evidence of this criterion is not consistently found in all student projects.

# Previous Team Report (2012): Causes of Concern

# 1.1.2. Learning Culture and Social Equity-Studio Culture Policy

The team noted that the Studio Culture Policy had only recently been revisited for revision and refinement. Prior to that, there had been little to no development of this policy for several years. Students at the Blacksburg campus had indicated that they had been recently involved to review and discuss this policy within the past two weeks. There was no indication on the part of the students that they would be involved in a collaborative update of the policy with faculty.

Students at the WAAC campus were aware that the policy existed, but had little knowledge of what it entailed. Neither students nor faculty at WAAC felt that the policy was necessarily required

at the campus, due to the increased maturity level of its students, as well as weekly faculty/student meetings, held every Monday as an open discussion forum.

The team does note that the absence of the policy seems to have had no adverse effect on the studio culture. Refer to section I.1.2 for additional information.

**2018 Visiting Team Assessment**: The Architecture School has periodically reviewed the Studio Culture Policy, including a review in 2017 that was done by students, faculty, and staff. Students are aware of the studio culture policy. This included students at the WAAC who noted that the Studio Culture Policy was a good reflection of the school.

# 1.2.1. Faculty and Staff-Faculty Workload

Both students and faculty at the WAAC indicated that the workload for faculty at the facility was inordinately high, and that some professors appeared overworked. Full-time faculty indicated that a typical semester includes one lecture and a studio course, along with thesis committees. In addition, with only three, full-time Virginia Tech faculty, they are each on every thesis committee, compared to the smaller number of committees that the Blacksburg faculty are required to serve on. WAAC faculty reported that this, at times, made it difficult to pursue their own research work. Refer to I.2.1 for additional information.

**2018 Visiting Team Assessment**: In our discussion with faculty at the WAAC they did not indicate that workload was an issue. The APR indicates that workload issues have been addressed.

#### A.9 Historical Traditions and Global Culture

The history and theory courses offered in Blacksburg and the WAAC vary considerably in content and quality with regards to the fulfillment of the SPC category of Historical Traditions and Global Culture. In particular, ARCH 3116, the second part of the mandatory two-semester survey, reinforces a Eurocentric view of history at the expense of non-Western architecture. Non-Western material was extensively found in ARCH 3115 as well as ARCH 4034.

**2018 Visiting Team Assessment**: The two-course history and theory sequence ARCH 3115 and 3116 for undergraduate students and the two-course history and theory sequence ARCH 5134 for graduate students include non-Western examples and reflects a range of global historical traditions.

### III. Compliance with the 2014 Conditions for Accreditation

PART ONE (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT This part addresses the commitment of the institution, its faculty, staff, and students to the development and evolution of the program over time.

#### Part One (I): Section 1 - Identity and Self-Assessment

**I.1.1 History and Mission:** The program must describe its history, mission, and culture and how that history, mission, and culture shape the program's pedagogy and development.

- Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that shapes or influences the program.
- The program must describe its active role and relationship within its academic context and university community. The description must include the program's benefits to the institutional setting and how the program as a unit and/or individual faculty members participate in university-wide initiatives and the university's academic plan. The description must also include how the program as a unit develops multidisciplinary relationships and leverages opportunities that are uniquely defined within the university and its local context in the community.

# [X] Described

# 2018 Analysis/Review:

The architecture professional program was initiated in 1928 at Virginia Polytechnic Institute as architectural engineering. The first professional degree was offered in 1956. Since then the program grew under the Burchard / Ferrari years. The curriculum emphasized process and experimentation over solutions. Building construction and systems were taught as the student progressed through the program. A study abroad program component was added in 1966 and continues. In 1980, an urban learning environment was established with the addition of the Washington-Alexandria Architecture Center (WAAC) in association with the surrounding professional community.

Dean Steger led the College from 1983 to 1993. He focused on current needs of the profession, future challenges, and increasing the research and technological presence in the University. The school organized around early Burchard / Ferrari themes of self-activation and freedom to determine focus of education with a strong emphasis on holistic and heuristic learning. In 1992 the University Center for European Studies was created to provide a base for the Europe Study Abroad Residency program in Lake Lugano, providing an environment for architecture students as well as other majors within the university. Subsequent deans led the college through periods of growth. In 2002 the Chicago Studio was established. Under Dean Davis, the Myers-Lawson School of Construction was founded in collaboration with the Department of Civil Engineering.

Dean Richard Blythe began his tenure as dean of the college in October 2017. Today students are encouraged to take advantage of the wide range of educational offerings within the college, as well as the university. Architecture students continue to win awards and out-perform the national averages for the Architect Registration Exam (ARE). The programs rank highly in both professional rankings and academics.

The college and department are committed to research-oriented programs, which are a key component of the Virginia Tech's mission. In 2007, a PhD program in Architecture and Design Research was begun, continuing its research emphasis. Through the Center for Design Research (CDR) students continue innovative research with design-build projects such as the FutureHAUS, which is composed of transdisciplinary research groups, and the LumenHAUS. Research and outreach is conducted in building construction, sustainability and design-build. CDR has garnered corporate sponsorships, national recognitions, and awards serving national and international architecture communities. These programs further the concepts of the university and college mission.

- **I.1.2 Learning Culture:** The program must demonstrate that it provides a positive and respectful learning environment that encourages optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments, both traditional and nontraditional.
  - The program must have adopted a written studio culture policy and a plan for its implementation, including dissemination to all members of the learning community, regular evaluation, and continuous improvement or revision. In addition, the plan must address the values of time management, general health and well-being, work-school-life balance, and professional conduct.
  - The program must describe the ways in which students and faculty are encouraged to learn both inside and outside the classroom through individual and collective learning opportunities that include but are not limited to field trips, participation in professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities.

# [X] Demonstrated

### 2018 Analysis/Review:

The program supports the Virginia Tech Principles of Community, which affirm the values of mutual respect, diversity, and dignity across the university. Biennially, all faculty and staff in the College of Architecture and Urban Studies (CAUS) are required to participate in training workshops related to Conflict Resolution, Harassment and Discrimination, Title IX, and the Violence Against Women Act.

According to the APR, since the last accreditation visit, the Studio Culture Policy has been evaluated twice. The policy is distributed to all incoming students and included in the School's e-newsletter, the A+D Weekly, at the start of each school year. A culture of mutual respect and understanding is found in the text of the program's Studio Culture Policy that reflects ideas of individual and collective well-being. We observed that it seems to be lived daily within the studios and the culture of the school.

The school encourages many student-led organizations such as AIAS, NOMAS, and a student-run publication, "Studio Collective." Students and faculty engage in research through the Center for Design Research.

- **I.1.3 Social Equity:** The program must have a policy on diversity and inclusion that is communicated to current and prospective faculty, students, and staff and is reflected in the distribution of the program's human, physical, and financial resources.
  - The program must describe its plan for maintaining or increasing the diversity of its faculty, staff, and students during the next two accreditation cycles as compared with the existing diversity of the faculty, staff, and students of the institution.
  - The program must document that institutional-, college-, or program-level policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other diversity initiatives at the program, college, or institutional level.

# [X] Demonstrated

# 2018 Analysis/Review:

The university is guided by the Diversity Strategic Plan 2013-2018. The plan also encourages colleges to develop their own diversity plans. The College of Architecture and Urban Studies (CAUS) has a diversity

committee that hosts events related to topics of social equity. In addition, the International Archive of Women, National Organization of Minority Architecture Student chapter (NOMAS), and the Student Coalition Organizing Progressive Engagement make important contributions to diversity and social equity.

- **I.1.4 Defining Perspectives:** The program must describe how it is responsive to the following perspectives or forces that affect the education and development of professional architects. The response to each perspective must further identify how these perspectives will continue to be addressed as part of the program's long-range planning activities.
- **A.** Collaboration and Leadership. The program must describe its culture for successful individual and team dynamics, collaborative experiences, and opportunities for leadership roles.
- **B. Design.** The program must describe its approach for developing graduates with an understanding of design as a multidimensional process involving problem resolution and the discovery of new opportunities that will create value.
- **C. Professional Opportunity.** The program must describe its approach for educating students on the breadth of professional opportunities and career paths, including the transition to internship and licensure.
- **D.** Stewardship of the Environment. The program must describe its approach to developing graduates who are prepared to both understand and take responsibility for stewardship of the environment and natural resources.
- **E.** Community and Social Responsibility. The program must describe its approach to developing graduates who are prepared to be active, engaged citizens able to understand what it means to be professional members of society and to act ethically on that understanding.

## [X] Described

#### 2018 Analysis/Review:

Collaboration and Leadership: There is a strong emphasis on collaboration and team-based learning in the college and within undergraduate and graduate studio environments. The College of Architecture and Urban Studies and School of Architecture + Design recognize that the profession is highly collaborative and encourage student dialog within the design lab courses and studios. Formal and informal study groups are encouraged, with students sharing study material for a variety of classes.

Mentoring is found between upper level and lower level students, providing students with an opportunity to hone their leadership capabilities. The cross-collaboration of different studio years and classes also exposes students to different design approaches that are beneficial to their architecture experience. The school's publication "Studio Collective" gives architecture students a forum to collaborate with other architecture students as well as university students. Student and faculty collaboration is present in solar decathlon projects, the Community Design Assistance Center and the Center for Design Research. Activities encourage collaboration on many levels in both public and private communities. The college activities provide leadership opportunities for students in team oriented projects.

Design: The school of architecture encourages each student to understand personal strengths and interests in pursuing a design education. This is evident in the broad range of explorations presented in the body of the student work. A wide range of opportunities support students' paths through the curriculum, workshops and facilities. Students are offered an array of off-campus curricular and extracurricular enrichment opportunities. Opportunities to explore urban settings are found in the Chicago studio and in Alexandria at the Washington Alexandria Architecture Center (WAAC), where students work with other students from an international consortium of schools. Study abroad opportunities are offered at the Steger Center for International Scholarship in Switzerland.

Professional Opportunity: The school supports part time employment opportunities in Chicago and Alexandria as well as a for credit Architectural Professional Internship Program. The school hosts a Career Day and ARCH 4044/5044G Professional Practice provides information regarding the architectural experience program, ARE, and alternative practices. Kevin Jones, faculty for the above course serves as the Architect Licensing Advisor. Students benefit from an engaged and large alumni network.

Stewardship of the Environment: Stewardship and the Environment is addressed through required coursework and students also have an opportunity to pursue independent study options and minors in fields that address the topic. Extra-curricular opportunities including participation in faculty research, research center projects, and design-build projects, and include initiatives like the Prince William Eco Park Study and the Solar Decathlon Middle East.

Community and Social Responsibility: There are several avenues for the students and faculty to become involved with their community and further their interests in social responsibility. Examples include Community Design Assistance Center (CDAC) providing support to underserved communities in southwest Virginia, and the International Archive for Women in Architecture (IAWA) with its collection giving a voice to the impact and legacy of women. Architecture students are also involved in university-wide programs Habitat for Humanity and and Hokies for Haiti. These diverse involvements enforce the university motto "That I may serve".

**I.1.5 Long-Range Planning:** The program must demonstrate that it has a planning process for continuous improvement that identifies multiyear objectives within the context of the institutional mission and culture.

### [X] Demonstrated

## 2018 Analysis/Review:

The College of Architecture and Urban Studies (CAUS) and the School of Architecture + Design participate in university level strategic planning. The university has been guided by the 2012-18 University Strategic Plan. The college has been guided by the CAUS Strategic Plan 2012-18.

A major current university level strategic initiative is "Beyond Boundaries," which focuses on curricular destination areas. Design teaching and learning are primary in this strategic initiative, and the college and school are participants in planning and implementation. The university is also focused on the development of a new core curriculum. Within the college and school, long-range planning is guided by an open dialog between faculy, staff, and college and school administration.

Currently the university is working with colleges to develop metrics in relation to the new budget model, which will drive strategic intitatives. As part of this strategic planning, colleges and departments are developing means to evaluate metrics for student and faculty success, and means to effectively use them in assessments. The university is also assessing the role of initiatives in the National Capital Region (NCR). The Washigton Alexandria Architecture Center (WAAC) will be an important player in this initiative.

The university, college, and school have experienced leadership changes since 2014, resulting in a new president, interim provost, dean and director. Along with these leadership changes has come a university-wide realignment planning process. Members of the School of Architecture + Design faculty have been active participants in the hiring and planning processes.

# I.1.6 Assessment:

- **A. Program Self-Assessment Procedures:** The program must demonstrate that it regularly assesses the following:
- How well the program is progressing toward its mission and stated objectives.

- Progress against its defined multiyear objectives.
- Progress in addressing deficiencies and causes of concern identified at the time of the last visit.
- Strengths, challenges, and opportunities faced by the program while continuously improving learning opportunities.

The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success.

**B.** Curricular Assessment and Development: The program must demonstrate a well-reasoned process for curricular assessment and adjustments, and must identify 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.

## [X] Demonstrated

# 2018 Analysis/Review:

Evidence of program assessment procedures was provided in the APR and was discussed in meetings with the program heads, dean, and provost. The College of Architecture and Urban Studies uses formal and informal means of program assessment including following university specific procedures for review of programs. The college uses accreditation assessment, such as the NAAB's VTR, as the basis for review in the larger college context and in relation to college and university strategic plans. The university requires review and assessment related to budgeting and alumni perception. The new budget model, Partnership for Incentive Based Budget (PIBB) requires schools, colleges, and departments to identify metrics including international, national and regional distinction, faculty and student success, and aspirational and competitive peers for benchmarking. Schools and colleges are required to submit annual reports to the university assessing degree programs as part of the Southern Association of Colleges and Schools (SACS) accreditation process. Faculty activity and administration performance are reviewed regularly.

The APR describes curricular assessment and development which involved the administration, students, and faculty. Students typically participate in end-of-semester course evaluations. These results are distributed to each faculty member and used in their annual review, tenure review and promotions. Departmental faculty participate in the college's curriculum committee. This committee is responsible for developing and assessing curricular proposals in courses as they move through university processes. Curriculum is regularly vetted through the review of syllabi. Meetings with faculty, students, and administrative staff indicated that assessment of the use of digital technologies alongside other teaching and learning tools available in the school is encouraged as part of the individual student's process.

### Part One (I): Section 2 – Resources [hierarchy of heads, should this start on new pg?]

#### I.2.1 Human Resources and Human Resource Development:

The program must demonstrate that it has appropriate 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 demonstrate that it balances the workloads of all faculty to support a tutorial exchange between the student and the teacher that promotes student achievement.
- The program must demonstrate that an Architecture Licensing Advisor (ALA) has been appointed, is trained in the issues of the Architect Experience Program (AXP), has regular communication with students, is fulfilling the requirements as outlined in the ALA position description, and regularly attends ALA training and development programs.
- The program must demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement.
- The program must describe the support services available to students in the program, including but not limited to academic and personal advising, career guidance, and internship or job placement.

# [X] Demonstrated

#### 2018 Team Assessment:

Evidence was found in the APR and confirmed in meetings with faculty, students, and administration. The faculty have multiple paths for professional development. Opportunities for support of teaching development include the university's Center for Instructional Development and Educational Research (CIDER) which offers faculty grants for research on the scholarship of teaching and learning and the university's Technology-enhanced Learning and Online Strategies (TLOS) which promotes online programs and technology-enhanced learning. There is also support for faculty research and scholarship. This includes support for travel to conferences and international travel offered through the Office of Vice President for Research. Sabbaticals and study leaves for research are available for faculty. In the last five years (2013-2018) ten faculty have benefited from this opportunity. Staff development funds are provided to attend off-campus seminars, training courses and lectures. The funds are offered by the University Organization and Professional Development office.

The current Architecture Licensing Advisor (ALA), Kevin Jones, AIA, was appointed to the position in 2017. He brings experience with AXP and holds informational meetings to discuss with and inform students about AXP and the ARE. In the spring of 2017 an NCARB representative was on campus to further help facilitate the AXP/ARE informational session.

The college uses standard indicators and individualized assessments to understand the progress of each student. By establishing a Coordinator of Academic Advising, the college has increased its support of academic advising for undergraduate students. This also works in concert with the university's new suite of advising tools "Student Success Collaborative." A grant was awarded in 2017 for a new dedicated advising position, doubling the advising capacity for the B. Arch. program.

New undergraduate student orientation sessions for both students and families are offered upon admission and prior to the start of classes. Student academic and career guidance is available during the foundation studio year. Advising sessions are scheduled for each student with the academic advisor each semester prior to the course request deadline. Additional meetings can be scheduled on an as-needed basis. Graduate student advising is carried out by the M. Arch. program chair and faculty. It is also part of the initial interview process.

A career day is held annually in the spring semester. It was attended by eighty-two firms in 2017 and approximately ninety in 2018. During this event, students have the opportunity to present their portfolios to the attending firms. This can provide both summer internships and full-time employment. Lectures are also tied in with this event. During the year students are updated in the school's weekly e-newsletter as well as through career discovery resources and employment opportunities on the Architecture + Design webpage.

**I.2.2 Physical Resources:** The program must describe the physical resources available and how they support the pedagogical approach and student achievement.

Physical resources include but are not limited to the following:

- Space to support and encourage studio-based learning.
- Space to support and encourage didactic and interactive learning, including labs, shops, and equipment.
- Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.
- Information resources to support all learning formats and pedagogies in use by the program.

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, on-site, or hybrid formats have on digital and physical resources.

# [X] Described

**2018 Team Assessment:** Physical resources were described in the APR and confirmed by building tours during the team visit. The program has adequate space to support the studio-based learning. Studios at each year of course work are arranged for interaction among the students. Faculty offices often face studios or are within the studios. Faculty locations encourage student advising and support roles. Library, shops areas, printing facilities, and research facilities are fairly well distributed and accessible at the Blacksburg campus. A visit indicated that this is also true for the Washington Alexandria Architecture Center.

**I.2.3 Financial Resources:** The program must demonstrate that it has appropriate financial resources to support student learning and achievement.

#### [X] Demonstrated

**2018 Team Assessment:** Data for the budget is provided in the APR and reflects income and expenditures at the school level that includes the B. Arch., M. Arch., and other programs. Data in the APR shows that financial resources have grown for the program over the past six years with some allocation adjustments made to best support programs where student numbers have increased. In addition to the university designated budget, the programs are supported by student fees (differential tuition) and increases in fundraising and endowments. Major purchases for the labs and equipment to support instruction and research under capital projects have been made in the last few years. The university has shifted to a decentralized budget model to what they call a Partnership for an Incentive Based Budget (PIBB). The new budget model is expected to initiate strategic growth related to resource allocation and also focuses on increasing private funding and research revenue. The budget model changes coincide with an interest on the part of the university to increase undergraduate enrollment. The school administration is working with the university enrollment management office to make sure that this does not have a negative impact on school resources.

**I.2.4 Information Resources:** The program must demonstrate that all students, faculty, and staff have convenient, equitable access to literature and information, as well as appropriate visual and digital resources that support professional education in architecture.

Further, the program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resource professionals who provide information services that teach and develop the research, evaluative, and critical-thinking skills necessary for professional practice and lifelong learning.

#### [X] Demonstrated

#### 2018 Team Assessment:

Information resources were described in the APR and confirmed during tours of the architecture facilities, Cowgill Hall at the Blacksburg campus and the Washington Alexandria Architecture Center. The college has a range of visual and digital information resources available to the students and faculty. The Art and Architecture Library is located in Cowgill Hall and is the largest branch of the university system. It supports the college as well as related art and design courses in the university. There are over 80,000 volumes, a visual arts database with 2.1 million images, and over 350 drawings sets. In addition, it has an increasing online and digital access. The Art and Achitecture librarian available for research, project, and training advisement. It was stated that the library is currently without a Head Librarian or Public Services Specialist. During the site visit it was announced that a new librarian was recently hired and scheduled to begin in the near future.

Faculty and students suggest additions in new journals, books, DVDs, and online resources for the library collection. The library has Architecture + Design school theses available online and in print for use by students and faculty. A unique aspect in the library is that it has a developing furniture collection of works by important architects and designers. Another aspect of the collection is the International Archive of Women in Architecture, a joint program between the main and college libraries. This is a national and international collection of women's contributions to the built environment.

The Washington-Alexandria Center Library has amassed over 5,000 books and periodicals through generous donations from faculty, students, alumni and friends of the Center. There is a full-time librarian to help students and faculty with research needs. In addition, they have access to the VTLS digital catalogue, Inter-Library Loan system, area libraries, and Library of Congress.

#### I.2.5 Administrative Structure and Governance:

- Administrative Structure: The program must describe its administrative structure and identify key personnel within the context of the program and school, college, and institution.
- **Governance:** The program must describe the role of faculty, staff, and students in both program and institutional governance structures. The program must describe the relationship of these structures to the governance structures of the academic unit and the institution.

# [X] Described

#### 2018 Team Assessment:

The APR included university and college administrative organizational charts for Virginia Tech and the College of Architecture and Urban Studies. The provost reports directly the university president, and the eleven academic deans report to the provost. The college has four school directors who report to the dean and are supported by school and college staff. Reporting to the director of the School of Architecture + Design, there are seven program chairs, four of whom oversee areas of the B. Arch. and M. Arch. programs. The director of the Washington Alexandria Architecture Center also reports to the school director. The chairs and administrative staff work closely together to coordinate program initiatives and overlaps. The program chairs and directors also work closely with faculty on matters pertaining to curriculum and with staff in matters pertaining to student advising.

The university currently has an interim provost, and there is both a new dean and a new school director since the last NAAB accreditation visit. There is no formal student governance structure in the school, but student input is encouraged through groups such as AIAS, NOMA, and other student organizations, and ad hoc student committees are formed when issues that impact students arise.

# PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

Part Two (II): Section 1 – Student Performance – Educational Realms and Student Performance Criteria

**II.1.1 Student Performance Criteria:** The SPC are organized into realms to more easily understand the relationships between each criterion.

**Realm A: Critical Thinking and Representation:** Graduates from NAAB-accredited programs must be able to build abstract relationships and understand the impact of ideas based on the study and and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. Graduates must also be able to use a diverse range of skills to think about and convey architectural ideas, including writing, investigating, speaking, drawing, and modeling.

Student learning aspirations for this realm include

- · Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Assessing evidence.
- Comprehending people, place, and context.
- · Recognizing the disparate needs of client, community, and society.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### **2018 Team Assessment:**

B. Arch.: Evidence of student achievement at the prescribed level can be found in ARCH 4515 and 4516 Architecture V, and ARCH 4524 Thesis Documentation.

M. Arch.: Evidence of student achievement at the prescribed level was found in the final documents prepared for ARCH 5994 Research and Thesis.

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

B. Arch. [X] Met

M. Arch. [X] Met

2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4515 and 4516 Architecture V, and ARCH 4524 Thesis Documentation.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5994 Research and Thesis.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4515 and 4516 Architecture V, and ARCH 4524 Thesis Documentation.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5994 Research and Thesis.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 2015 and 2016 Architecture II, and ARCH 3015 and 3016 Architecture III.

M. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 5515 and 5516 Architecture and Systems Lab, and ARCH 5755 and 5756 Advanced Design Lab.

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

B. Arch. [X] Met

M. Arch. [X] Met

2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 1015 and 1016 Foundation Design Lab, and ARCH 4516 and 4524 Architecture V + Thesis Documentation.

M. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 4715 and 4716, and ARCH 5775G and 5776G Qualifying Design Lab.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 3015 and 3016 Architecture III, and ARCH 4015 and 4016 Architecture IV Integrative Design.

M. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 5755 and 5756 Advanced Design Lab.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 3115 and 3116 History of Architecture.

M. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 5134 Topic in Architecture History & Theory.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 4034 Building Cities.

M. Arch.: evidence of student achievement at the prescribed level was found in student work prepared for ARCH 5044G Professional Practice, and ARCH 5565 and 5566 Building Materials & Construction.

**Realm A. General Team Commentary:** Both undergraduate and graduate courses demonstrate a breadth of research, communication and design skills, with student work indicating a particular strength in design exploration through drawing and model making. There is evidence of the full range of issues that are addressed in the curriculum in individual thesis projects, and according to the interest of the student.

**Realm B: Building Practices, Technical Skills, and Knowledge:** Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials, and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.

Student learning aspirations for this realm include

- · Creating building designs with well-integrated systems.
- · Comprehending constructability.
- · Integrating the principles of environmental stewardship.
- · Conveying technical information accurately.
- **B.1 Pre-Design:** *Ability* to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in student work in ARCH 4015 and 4016 Architecture IV Integrative Design.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5755 and ARCH 5756 Advanced Design Laboratory and ARCH 5994 Research and Thesis. Evidence was also found in ARCH 5515 and 5515 Architecture Systems Lab.

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

B. Arch. [X] Met

M. Arch.
[X] Not Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 3015 and 3016 Architecture III.

M. Arch.: evidence of student achievement at the prescribed level was not consistently found in ARCH 5755 and ARCH 5756 Advanced Design Laboratory and ARCH 5515 and 5515 Architecture Systems Lab.

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

B. Arch. [X] Met

M. Arch.
[X] Not Met

# 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4015 and 4016 Architecture IV Integrative Design.

M. Arch.: evidence of student achievement at the prescribed level was not consistently found in ARCH 5755 and ARCH 5756 Advanced Design Laboratory. (Note that the 2009 criterion B.2 Accessibility, now part of this criterion, was not met).

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4015 and 4016 Architecture IV Integrative Design.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5565 and 5566 Architecture Systems Lab.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4075 and 4076 Building Structures I & II.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5775 and ARCH 5776 Intermediate Building Structures.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4055 and 4056 Environmental Building Systems.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5775G Environmental Building Systems.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 3045 and 3046 Building Assemblies.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5565 and ARCH 5566 Building Materials and Construction.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 3045 and 3046 Building Assemblies.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5565 and ARCH 5566 Building Materials and Construction.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4055 and 4056 Environmental Building Systems.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5755G Building Environmental Systems.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4055 and 4056 Professional Practice.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5044G Professional Practice.

**Realm B. General Team Commentary:** In the B. Arch. curriculum, the evidence provided shows student achievement in the areas of building practices, technical skills, and knowledge. The work presented shows an integration of the skills in Realm B.

Evidence for the M. Arch. curriculum shows student achievement for most of building practices, technical skills and knowledge. The evidence for site design and codes and regulations was not consistently found in the student work.

**Realm C: Integrated Architectural Solutions:** Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.

Student learning aspirations in this realm include:

- · Comprehending the importance of research pursuits to inform the design process.
- · Evaluating options and reconciling the implications of design decisions across systems and scales.
- · Synthesizing variables from diverse and complex systems into an integrated architectural solution.
- · Responding to environmental stewardship goals across multiple systems for an integrated solution.
- **C.1 Research:** *Understanding* of the theoretical and applied research methodologies and practices used during the design process.

B. Arch. [X] Met

M. Arch. [X] Met

#### **2018 Team Assessment:**

B. Arch: evidence of student achievement at the prescribed level was found in ARCH 4015 and 4016 Architecture IV Integrative Design, and ARCH 3015 and 3016 Architecture III.

M. Arch: evidence of student achievement at the prescribed level was found in ARCH 5755 and 5756 Advanced Design Lab, and ARCH 5994 Research & Thesis.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch: evidence of student achievement at the prescribed level was found in ARCH 4015 and 4016 Architecture IV Integrative Design, and ARCH 3015 and 3016 Architecture III.

M. Arch: evidence of student achievement at the prescribed level was found in ARCH 5755 and 5756 Advanced Design Lab, and ARCH 5994 Research & Thesis.

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

B. Arch. [X] Met

M. Arch. [X] Not Met

#### 2018 Team Assessment:

B. Arch: evidence of student achievement at the prescribed level was found in ARCH 4015 and 4016 Architecture IV Integrative Design, and ARCH 3015 and 3016 Architecture III.

M. Arch: evidence of student achievement at the prescribed level was not consistently found in ARCH 5755 and 5756 Advanced Design Lab, and ARCH 5994 Research & Thesis.

**Realm C. General Team Commentary:** In the B. Arch. and M. Arch. programs the scale of the integrative projects is, in general, midsized with moderately complex programs and sites. The projects allow students to address the range of issues that demonstrate an integrative process. Research and Integrated Evaluation and Decision-Making is evidenced across a series of courses leading to evidence of Integrative Design. In the M. Arch. program, the evidence for Integrative Design was not consistent across all student projects.

**Realm D: Professional Practice:** Graduates from NAAB-accredited programs must understand business principles for the practice of architecture, including management, advocacy, and the need to act legally, ethically, and critically for the good of the client, society, and the public.

Student learning aspirations for this realm include:

- Comprehending the business of architecture and construction.
- · Discerning the valuable roles and key players in related disciplines.

Understanding a professional code of ethics, as well as legal and professional responsibilities.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4044 Professional Practice.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5044G Professional Practice.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4044 Professional Practice.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5044G Professional Practice.

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

B. Arch. [X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4044 Professional Practice.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5044G Professional Practice.

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

B. Arch.

[X] Met

M. Arch. [X] Met

#### 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4044 Professional Practice.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5044G Professional Practice.

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

B. Arch. [X] Met

M. Arch. [X] Met

# 2018 Team Assessment:

B. Arch.: evidence of student achievement at the prescribed level was found in ARCH 4044 Professional Practice.

M. Arch.: evidence of student achievement at the prescribed level was found in ARCH 5044G Professional Practice.

**Realm D. General Team Commentary:** The undergraduate and graduate level professional practice courses indicate that students gain a strong understanding of the responsibilities, conduct. and practice in the professional realm of architecture.

# Part Two (II): Section 2 - Curricular Framework

#### **II.2.1 Institutional Accreditation**

For a professional degree program in architecture to be accredited by the NAAB, the institution must meet one of the following criteria:

- The institution offering the accredited degree program must be or be part of an institution accredited by one of the following U.S. regional institutional accrediting agencies for higher education: the Southern Association of Colleges and Schools (SACS); the Middle States Association of Colleges and Schools (MSACS); the New England Association of Schools and Colleges (NEASC); the North Central Association of Colleges and Schools (NCACS); the Northwest Commission on Colleges and Universities (NWCCU); or the Western Association of Schools and Colleges (WASC).
- Institutions located outside the United States and not accredited by a U.S. regional accrediting agency may pursue candidacy and accreditation of a professional degree program in architecture under the following circumstances:
  - a. The institution has explicit written permission from all applicable national education authorities in that program's country or region.
  - b. At least one of the agencies granting permission has a system of institutional quality assurance and review which the institution is subject to and which includes periodic evaluation.

# [X] Met

**2018 Team Assessment:** The APR included a link to the most recent accreditation letter from the Southern Association of Colleges and Schools (SACS).

**II.2.2 Professional Degrees and Curriculum:** The NAAB accredits the following 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.

The B. Arch., M. Arch., and/or D. Arch. are titles used exclusively with NAAB-accredited professional degree programs. The B. Arch., M. Arch., and/or D. Arch. are recognized by the public as accredited degrees ind therefore should not be used by nonaccredited programs.

Therefore, any institution that uses the degree title B. Arch., M. Arch., or D. Arch. for a nonaccredited degree program must change the title. Programs must initiate the appropriate institutional processes for changing the titles of these nonaccredited programs by June 30, 2018.

The number of credit hours for each degree is specified in the *2014 NAAB Conditions for Accreditation*. All accredited program must conform to the minimum credit hour requirements:

#### [X] Met

# 2018 Team Assessment:

The APR describes the curriculum for both the B. Arch/ and M. Arch. degrees and provides links to online bulletin information. Evidence fulfilling this condition is found in the APR pages 71-83.

The Bachelor of Architecture degree requires the completion of 160 semester hours over ten semesters. Thirty-four credit hours are designated to university liberal education requirements, an additional six credits are architecture liberal education requirements, and fourteen are free electives. One hundred credits are designated for professional program requirements and an additional six are for professional

program electives. Minors in building construction, landscape architecture, and industrial design are available for students. They can also pursue dual degrees, concentrations, and minors in other colleges in the university. Professional internships, study abroad, in Chicago, or at the WAAC is factored into the students' curricular plan.

There are two tracks in the M. Arch. program, the 84-credit non-preprofessional M. Arch. 3 and the 54-credit preprofessional M. Arch. 2. For degree completion the M. Arch. 3 requires seven semesters (one summer) and M. Arch. 2 requires four semesters.

The first year of the M. Arch. 3 is designated the Qualifying Design Laboratory. Students in the M. Arch. 3 are required to take the summer Advanced Design Laboratory after their second year or study where Integrated Design is the focus of the studio course. Students in the M. Arch. 3 complete the NAAB general studies requirement in their undergraduate years. At the graduate level they take 81 required professional program credits and 3 professional elective credits. Students in the M. Arch. 2 also complete the NAAB general studies requirement in their undergraduate years. At the graduate level they take 36 required professional program credits and 18 professional elective credits. Opportunities for graduate students to study at the Steger Center in Riva San Vitale Switzerland, or at the Washington Alexandria Architecture Center (WAAC) are available for graduate students. The M. Arch. 2 program can be completed at either Blacksburg or the WAAC.

The school of architecture currently offers a non-accredited M. Arch. 1 degree. During the visit the school director shared a plan to rename the degree with the visiting team.

# Part Two (II): Section 3 – Evaluation of Preparatory Education

The program must demonstrate that it has a thorough and equitable process for evaluating the preparatory or preprofessional education of individuals admitted to the NAAB-accredited degree program.

- · Programs must document their processes for evaluating a student's prior academic course work related to satisfying NAAB student performance criteria when a student is admitted to the professional degree program.
- In the event a program relies on the preparatory educational experience to ensure that admitted students have met certain SPC, the program must demonstrate it has established standards for ensuring these SPC are met and for determining whether any gaps exist.
- The program must demonstrate that the evaluation of baccalaureate-degree or associate-degree content is clearly articulated in the admissions process, and that the evaluation process and its implications for the length of a professional degree program can be understood by a candidate before accepting the offer of admission. See also Condition II.4.6.

# [X] Met

#### 2018 Team Assessment:

Evidence fulfilling this condition is found in the APR pages 83-85.

B. Arch. applicants are evaluated by the the university along with other undergraduate applicants. There are no required professional preparatory educational requirements.

M. Arch applicants are evaluated on an individual basis. The 84-credit M. Arch. 3 program is open to students who have completed a Bachelor's degree in a wide range of disciplines. Applicants are evaluated using undergraduate transcript and standardized tests. A portfolio is required for students who apply for the M. Arch. 2 degree but is not required for students who apply for the M. Arch. 3 degree. All students are informed of their course of study in a post-admissions review and interviewed by the chair of the graduate program.

The 54-credit M. Arch. 2 is considered an Advanced Professional Studies option that is open to students with preprofessional degrees from a school with a NAAB-accredited B. Arch., M. Arch. or equivalent. Upon admission, each student is evaluated using a worksheet (M. Arch. 2, Advanced Professional Program, Advanced Credit Admissions Analysis), a sample was included in the APR. Undergraduate coursework is mapped to NAAB SPCs in the A, B, and C realms. Students who are found to be deficient in any of the areas are required to take additional coursework. This is the case for both WAAC and Blacksburg M. Arch. 2 students. Students found deficient in Integrative Design are informed that they will need to take the two-course sequence, ARCH 5755 and 5756 Advanced Design Lab, in the summer after their first year. Because of the wide range of requirements for pre-professional programs, review of student work at the time of admissions closely monitors the coursework that comes out of pre-professional programs. During the post-admissions review, students are asked to show additional course material if the content of a course is not evident through the course description.

# Part Two (II): Section 4 - Public Information

The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the public. As a result, the following seven conditions require all NAAB-accredited programs to make certain information publicly available online.

#### II.4.1 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*, Appendix 1, in catalogs and promotional media.

# [X] Met

#### 2018 Team Assessment:

A link to the statement of accredited degrees for the B. Arch, M. Arch 2, and M. Arch 3 was provided in the APR. The statement can be found in the program's website under the tab NAAB accreditation. See: http://archdesign.vt.edu/architecture/naab.

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

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

The 2014 NAAB Conditions for Accreditation

The Conditions for Accreditation in effect at the time of the last visit (2009 or 2004, depending on the date of the last visit)

The NAAB Procedures for Accreditation (edition currently in effect)

#### [X] Met

#### 2018 Team Assessment:

Links for the 2009 & 2014 *NAAB Conditions for Accreditation* & the 2015 *Procedures for Accreditation* were provided in the APR. They can be found in the program's website under the tab NAAB accreditation. See: http://archdesign.vt.edu/architecture/naab.

## **II.4.3 Access to Career Development Information:**

The program must demonstrate that students and graduates have access to career development and placement services that assist them in developing, evaluating, and implementing career, education, and employment plans.

#### [X] Met

#### 2018 Team Assessment:

Links for career development information was profided in the APR. Access to links for multiple career development informational websites can be found in the program's website under the tab NAAB accreditation. See: http://archdesign.vt.edu/architecture/naab.

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

In order to promote transparency in the process of accreditation in architecture education, the program is required to make the following documents electronically available to the public:

- All Interim Progress Reports (and narrative Annual Reports submitted 2009-2012).
- All NAAB Responses to Interim Progress Reports (and NAAB Responses to narrative Annual Reports submitted 2009-2012).
- · The most recent decision letter from the NAAB.
- · The most recent APR. [1]
- · The final edition of the most recent Visiting Team Report, including attachments and addenda.

### [X] Met

#### 2018 Team Assessment:

Links for the Virginia Tech APRs and VTRs were provided in the APR. Access to links for the 2017-18 Architecture Program Report (APR); 2014 Interim Progress Report; 2012 Visiting Team Report, and 2012 Decision Letter; and the 2011-12 Architecture Program Report (APR) can be found at: http://archdesign.yt.edu/architecture/naab.

#### II.4.5 ARE Pass Rates:

NCARB publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered useful to prospective students as part of their planning for higher/post-secondary education in architecture. Therefore, programs are required to make this information available to current and prospective students and the public by linking their websites to the results.

## [X] Met

#### 2018 Team Assessment:

Links to the ARE Pass Rates were provided in the APR. Access to links on the NCARB website for pass rates for the ARE 4.0 and 5.0 can be found at:

Pass rates, ARE 5.0: <a href="https://www.ncarb.org/pass-are/are5/pass-rates/are5-pass-rates-school">https://www.ncarb.org/pass-are/are5/pass-rates/are5-pass-rates-school</a>

Pass rates, ARE 4.0: https://www.ncarb.org/pass-are/are4/pass-rates/are4-pass-rates-school

# II.4.6 Admissions and Advising:

The program must publicly document all policies and procedures that govern how applicants to the accredited program are evaluated for admission. These procedures must include first-time, first-year students as well as transfers within and outside the institution.

This documentation must include the following:

- Application forms and instructions.
- Admissions requirements, admissions decision procedures, including policies and processes for evaluation of transcripts and portfolios (where required), and decisions regarding remediation and advanced standing.
- Forms and process for the evaluation of preprofessional degree content.
- Requirements and forms for applying for financial aid and scholarships.
- Student diversity initiatives.

# [X] Met

2018 Team Assessment:

Links to admissions information were provided in the APR. Public information for undergraduate, graduate, and international students admissions regarding applications, transfers, and computer requirements to the university can be found via the university website and via the school's portal at <a href="http://archdesign.vt.edu/admissions/">http://archdesign.vt.edu/admissions/</a>, and University's Cook Counseling Center, <a href="http://www.ucc.vt.edu/">http://www.ucc.vt.edu/</a>.

#### II.4.7 Student Financial Information:

- The program must demonstrate that students have access to information and advice for making decisions regarding financial aid.
- 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.

#### [X] Met

#### 2018 Team Assessment:

Links to student financial information were provided in the APR. Information can be found at: Cost Estimate for NAAB-accredited Degree Program http://archdesign.vt.edu/architecture/student-financial-information

Graduate Assistantships <a href="http://archdesign.vt.edu/admissions/graduate-assistantships">http://archdesign.vt.edu/admissions/graduate-assistantships</a>

Scholarships and Financial Aid http://archdesign.vt.edu/admissions/scholarships-and-financial-aid

## PART THREE (III): ANNUAL AND INTERIM REPORTS

**III.1 Annual Statistical Reports:** The program is required to submit Annual Statistical Reports in the format required by the *NAAB Procedures for Accreditation*.

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

### [X] Met

#### 2018 Team Assessment:

Annual statistical reports were included as web links in the APR. Access to annual statistical reports can be found at http://archdesign.vt.edu/architecture/naab

**III.2 Interim Progress Reports:** The program must submit Interim Progress Reports to the NAAB (see Section 10, *NAAB Procedures for Accreditation*, 2015 Edition).

#### [X] Met

#### 2018 Team Assessment:

The interim progress report were included as web links in the APR. Access to the interim progress report can be found at http://archdesign.vt.edu/architecture/naab

# IV. Appendices:

# **Appendix 1. Conditions Met with Distinction**

A.1 Professional Communication Skills: For the B. Arch. and the M. Arch., these criteria are met through the Thesis courses, ARCH 4515, 4516, 4524 and ARCH 5994.

A.2 Design Thinking Skills: For the B. Arch. and the M. Arch., these criteria are met through the Thesis courses, ARCH 4515, 4516, 4524 and ARCH 5994.

A.3 Investigative Skills: For the B. Arch. and the M. Arch., these criteria are met through the Thesis courses, ARCH 4515, 4516, 4524 and ARCH 5994.

Appendix 2. Team SPC Matrix

UNDERGRAD MATRIX (rev. 01-20-2108)	Student Performance Criteria (2014 Conditions) Ability_Understanding	Professional Communication Skills	<b>V</b> Design Thinking Skills		Architectural Design Skills	<b>Y</b> Ordering Systems	<b>Y</b> Use of Precedents	History and Global Culture	Cultural Diversity + Social Equity	B.1	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems and Assemblies	Building Materials and Assemblies	Building Service Systems	Financial Considerations	C.1	Integrated Evaluation and Decision-Making	Stakeholder Roles in Architecture	ក ទ Project Management	Business Practices	Legal Responsibilities	Professional Conduct
First Yr	ARCH 1015, 1016 Foundation Design Lab																								
	ARCH 2015, 2016 Architecture II ARCH 2034																								
	The Art of Building ESM 3704 Basic Principles of Structures																								
ear	ARCH 2044 Building Materials																								
Second Year	ARCH 3115, 3116 History of Architecture																								
	ARCH 3015, 3016 Architecture III																								
	ARCH 4075, 4076 Building Structures I-II																								
	ARCH 3045, 3046 Building Assemblies																								
<b>a</b>	ARCH 4055, 4056 Environmental Building Systems																								
Third Year	ARCH 3054 Building Analysis																								
	ARCH 4015, 4016 Architecture IV Integrative Design																								
	ARCH 4044 Professional Practice																								
ar	ARCH 4034 Building Cities																								
Fourth Year	ARCH 4114 Concepts Ideas Representation																								
Fifth Yr	ARCH 4515, 4516 + ARCH 4524 Architecture V + Thesis Documentation																								

Primary

Secondary

Pre-professional Equivalent M.Arch.2	h3			Student Performance Criteria (2014 Conditions)	Professional Communication Skills	Design Thinking Skills	Investigative Skills	Architectural Design Skills	Ordering Systems	Use of Precedents	History and Global Culture	Cultural Diversity + Social Equity	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems and Assemblies	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluation and Decision-Making	Integrative Design	Stakeholder Roles in Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct
Pre-profe	M.Arch 3		Required Courses in Professional Degree Progra	ım	A.1	A.2	A.3	A.4	A.5	A.6	<b>A</b> 7	A.8	B.1	B.2	B.3	B.4	B.5	B.6	B.7	B.8	B.9	B.10	C.1	C.2	C.3	D.1	D.2	D.3	D.4	D.5
			ARCH 4715-4716																											
		ear	Qualifying Design Lab ARCH 4705-4706																										$\longrightarrow$	
		First Year	Qualifying Design Seminar																											
		Ē	ARCH 5134 Topics in Arch. F	list &																										
			Theory [M.Arch3 History]																											
			ARCH 5515-5516												1															
			Architecture & Systems Lab																											
			ESM 3704																											
			Basic Principles of Structure	es .											<u> </u>															
		L	ARCH 5755G	toms																										
		Yea	Building Environmental Syst ARCH 5775G-5776G	terris																									$\longrightarrow$	_
		Second Year	Intermediate Building Struct	tures																										
		Sec	ARCH 5565-5566																											
			Building Materials & Constr	uction																										
			ARCH 5715-16																											
			Architecture and Urbanism Architecture and Urbanism	Lab											<u> </u>															
			Seminar																											
														1	1	1		1		I										
		Sum	ARCH 5755-5756 Advanced Design Lab																											
		0,	Advanced Design Lab																											
			ARCH 5994																											
		ear	Research & Thesis											-	<u> </u>															
		Third Year	ARCH 5044G Professional Practice																											
		듣	ARCH 5624																											
			Urban Design Seminar																											
			Ability			Prima	ırv																							

Ability Primary

Understanding Secondary

# **Appendix 3. The Visiting Team**

# Team Chair, Representing the ACSA

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# **Nonvoting Team Member**

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# **Nonvoting Team Member**

Katie Stodghill, AIA, NCARB

# V. Report Signatures

Respectfully Submitted,

[ate Wingst-Planger_
Kate Wingert-Playdon
Team Chair
Gabriel Durand-Hollis, FAIA
Team Member
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Wendy Ornelas, FAIA Team Member
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Mark Saccoccio, AIA
Team Member
h (k)
Tim Bhagrattee
Team Member
Byune Cmary
Bruce Lindsey
Non-Voting Team Member
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TAHWUM, S STORY !!
Katie Stodghill, AIA
Non-Voting Team Member