Name of Institution: Virginia Polytechnic Institute and State University
Name of Academic Unit: School of Architecture + Design

Interim Progress Report

Bachelor of Architecture (160 undergraduate credit hours)

Master of Architecture

Track I (M.Arch.2, preprofessional degree plus 54 graduate credit hours)
Track II (M.Arch.3, non-preprofessional degree plus 84 graduate credit hours)

Program Administrator:
Prof. Henri de Hahn, Director

Chief administrator for the academic unit in which the program is located:
Prof. A.J. Davis, FAIA, Dean

Provost:
Dr. Mark McNamee, Senior Vice President and Provost

President of the Institution:
Dr. Timothy Sands, President

Individual submitting the Interim Progress Report:
Prof. Henri de Hahn, Director

Name of individual to whom questions should be directed:
Prof. Henri de Hahn, Director

Year of the Previous Visit: 2012

Current Term of Accreditation: 6 years of accreditation

Submitted to: The National Architectural Accrediting Board
Date: December 11, 2014

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1. Plans for/Progress in Addressing Conditions Not Met from the 2012 Visiting Team Report

a. Conditions I.1-I.5 or II.2-II.3

b. Conditions II.1 (Student Performance Criteria)

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.

2012 Team Assessment: 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.

2014 B.Arch. Program Response:
The second- and third-year studio instructors have held multiple discussions regarding how to improve student performance in the pre-design area. The second-year studios (ARCH 2015-16) have introduced considerations of urban context, responses to topography, and climatic programming in a more systematic way. A new required course, ARCH 2044, *Building Materials*, has been added during the second year, and the existing required course, ARCH 2034, *The Art of Building*, has been extensively revised, providing a preliminary theoretical basis for this realm (please see links to course syllabi in the Supplemental Materials section of this Report). Between subjects covered in the studios and the course content of the two classes, we observe that, in the 3rd year studios (ARCH 3015-16), students are better prepared to understand and respond to site and context, and to produce a more detailed building program. In addition, the spring semester third-year studios (ARCH 3016) now require students to conduct zoning code reviews, as applicable for particular studio assignments, and a building code analysis for their studio projects. In Spring 2013 and 2014, several studios undertook a pilot program utilizing basic portions of the building code analysis worksheets (Plan Review Record) developed by the International Code Council (ICC). This pilot program is currently being reviewed to determine if student achievement has been enhanced and if the code analysis worksheets should be used by all third-year studios for Spring 2015. Discussions regarding further improvements are currently underway.

2014 M.Arch. Program Response:
The graduate studio faculty have discussed how to improve student performance in the pre-design area. The Architecture & Systems Lab (ARCH 5515-16) is introducing programming in a more systematic way to better prepare students to produce a more detailed building program in the Advanced Design Lab (ARCH 5755-56). Students in the Advanced Design Lab now conduct zoning code reviews and a building code analysis for their studio projects utilizing basic portions of the building code analysis worksheets (Plan Review Record) developed by the International Code Council (ICC). The use of code analysis worksheets is being evaluated to determine if their use should become a permanent part of the course. Discussions regarding further improvements are ongoing.

B. 6 Comprehensive Design (B. Arch): *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.7. Environmental Systems
A.9. Historical Traditions and Global Culture	B.9.Structural Systems
B.5. Life Safety	

2012 Team Assessment: B. Arch–Arch 3015-16- Only a limited number of projects were able to integrate the necessary SPCs thoroughly in one project, as was the case in the 2006 visit. The team had great difficulty 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.

2014 B.Arch. Program Response:
Extensive discussions have been held with the undergraduate architecture program faculty regarding how to improve student performance in the area of comprehensive design. Prior to the start of the Spring semester (in 2013 and 2014), the third-year studio faculty met collectively to discuss ways to address the comprehensive design criterion. The faculty have also recently met to review changes in the 2014 NAAB *Conditions* and to discuss adjustments in the courses and curriculum to meet the new standards. For the entire 3rd year, studio assignments and building tasks have been collectively examined to better target various aspects of comprehensive design. Faculty members agreed to adjustments to the types of projects assigned, especially in ARCH 3016, in order to improve student performance in comprehensive design, as well as to enhance knowledge and skills throughout Realm B. The faculty also reviewed, discussed, and shared the various methods and pedagogic tools they each employed to address and document compliance with the comprehensive design criterion and the various sub-criteria required to be integrated. Our annual 3rd year competition, which was just recently completed, has been redirected to specifically address comprehensive design. All third-year students, from all six third year design labs, participate in this annual competition; the duration of the competition is approx. one-and-one-half weeks.

To assess the level of student achievement with respect to comprehensive design, the third-year faculty met at the end of the 2013 and 2014 academic years and collectively reviewed examples of high and low pass student work from all third-year studios (ARCH 3016) to conduct a self-evaluation. Aspects of the third-year projects judged to be weak or not in full compliance with the comprehensive design criterion were addressed in depth to assist in guiding more effective student performance.

As a curricular adjustment, supporting coursework prior to the third year has been implemented to better provide students with knowledge of specific subject areas pertaining to comprehensive design and other student performance criteria in Realm B. We perceive that earlier integration in the curriculum at their second year fosters higher levels of achievement in the third-year studios (ARCH 3015-16). As previously mentioned, one of these courses, *ARCH 2044, Building Materials,* provides second-year students with a basic introduction to the attributes of materials with which buildings are built. For similar reasons, the course *ARCH 2034, The Art of Building,* has been extensively revised to include a more systematic introduction to basic concepts of building construction and assembly for students in the second year. This course also now includes a requirement for students to produce technically precise drawings documenting construction for their studio project (please see links to course syllabi in the Supplemental Materials section of this Report).

Concurrently, we have tested a parallel studio setting in the 4th year with projects to address comprehensive design and with greater emphasis on construction documentation. As an experiment, this studio was not yet mandatory for all 4th year students in Spring 2014. Results have been assessed by the faculty, and further adjustments to the content of the 4th year studio will be implemented for Spring 2015.

Discussions among the faculty regarding the comprehensive design project are ongoing, particularly, given the School's iterative educational model, with respect to the role of the fourth-year design studios and the fifth-year thesis in reinforcing and extending the habits developed in the third year of comprehensively integrating multiple design criteria in the building design process.

A.9 Historical Traditions and Global Culture (M. Arch): *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.

2012 Team Assessment: 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).

2014 M.Arch. Program Response:
Dr. Mark Schneider, who has taught the first semester of the undergraduate History of Architecture course (ARCH 3115) for a number of years, was charged with reworking the second semester of the Qualifying Design Seminar (ARCH 4706) to provide a more systematic and complete understanding of architectural history, including examples of significant works of architecture from all historical periods and cultures around the globe. Beginning with the spring semester of 2013, this revised course complemented the focus on the history of architectural theory covered in ARCH 4705.

Starting with the fall semester 2014, the program decided through continuous improvement assessment of student outcomes that the order of the Qualifying Design Seminar (ARCH 4705-06) should be flipped to improve the students' understanding of the seminar content. Therefore, the seminar developed by Dr. Mark Schneider was moved to the first portion of the Qualifying Design Seminar (ARCH 4705) to enhance the students' first understanding of historical traditions and global culture to then be followed with history of architectural theory in the spring semester (ARCH 4706), now taught by Prof. Frank Weiner.

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

2012 Team Assessment: 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.

2014 M.Arch. Program Response:
Students in the required Advanced Design Lab (ARCH 5755-56) are being required to produce a presentation specifically addressing all aspects of accessibility for their studio projects, including accessible route(s) through the site and building, accessible facilities such as restrooms, and compliance with other accessibility guidelines and requirements. This presentation includes drawings and/or overlays of other architectural drawings produced specifically for the purpose of documenting accessibility.

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

I.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.

2012 Team Assessment: The learning environment and studio culture criterion is satisfied by the following:

The goal of the school is to make an environment where students learn to take responsibility for their own education with the guidance of the faculty and within a holistic framework. The faculty is primarily responsible for establishing the necessary environment for the student's educational growth. The faculty opens the intellectual horizons that challenge the students to continually expand and deepen their critical understanding of the discipline of architecture. Both the students and the faculty have a responsibility to contribute to making the laboratory an environment that is respectful of individuals, shares in the intellectual life of the school, and is conducive to disciplined work. The laboratory is an environment in which the multiple facets of the student's formal education are brought into discourse with one another.

Policies and Procedures Related to Harassment and Discrimination
Discrimination or harassment is addressed by Virginia Tech's "Anti-Discrimination and Harassment Prevention Policy," Policy 1025 (http://www.policies.vt.edu/1025.pdf). Formal and informal processes are available for resolution of complaints related to harassment or discrimination. All faculty and staff in the College of Architecture and Urban Studies are required to attend harassment and discrimination prevention workshops conducted by the university Office of Equity and Access.

Policies for Academic Integrity
The Undergraduate Honor Code and the Graduate Honor Code define the expected standards of conduct for students in academic affairs. The Undergraduate Honor System (http://www.honorsystem.vt.edu) and the Graduate Honor System (http://ghs.grads.vt.edu/) are the university bodies charged with disseminating information about the Honor Code to the university community and with enforcement of the Honor Code, including investigating reports of Honor Code violations, such as cheating or plagiarism.

Diversity
The university's strategic plan for diversity explicitly calls upon the colleges to develop diversity plans of their own, consonant with those of the university. The College of Architecture and Urban Studies Diversity Strategic Plan can be found in its entirety in section I.2.1 Human Resources and Human Resource Development, Initiatives for Diversity.

The diversity of the school's student body has been significantly enhanced since the last accreditation visit (see Part III: Statistical Reports). Although progress has been made in the past five years regarding the number of women faculty members, faculty and staff diversity continues to lag behind both the diversity of the student body and the diversity of faculty university-wide. Virginia Tech, the College of Architecture and Urban Studies, and the School of Architecture + Design are committed to enhancing the diversity of the faculty and staff. Searches to fill faculty and staff positions must be conducted in accordance with the procedures defined by the Virginia Tech office of Equity and Access, and the applicant pool for each position must be certified as sufficiently diverse in order for the candidate review process to proceed.

For more information on Virginia Tech Equity Initiatives, see http://www.hr.vt.edu/oea/equityinitiatives/equityinitiatives-main.html. The school has engaged in rigorous efforts to recruit well-qualified women and minority candidates for available positions, and these efforts will be expanded for future searches in an attempt to enhance faculty and staff diversity.

2014 Program Response:
The Studio Culture Discussion Group, established in the fall of 2011, has continued to meet to develop proposed revisions to the School's Studio Culture Policy. Because the current policy, written in 2006, was developed primarily by a faculty group, it has been important to give students significant responsibility for proposing any necessary changes to the policy. Students serving on the Studio Culture Discussion Group, representing all levels in all of the School's programs, guided by the Director of the School of Architecture + Design, are preparing a report of their findings and recommendations, due to be completed in the Spring of 2015. At this time, faculty will re-enter the discussion, with a group of self-selected faculty joining the student group to refine and/or augment the proposed changes, prior to distributing the proposed updated policy to the wider School community for review and approval.

I.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.

2012 Team Assessment: The School of Architecture + Design is home to more than 1,150 students, approximately 725 of whom are in the architecture programs. Over 80 faculty members are based in the school's programs, approximately 30 of whom are in visiting or adjunct positions. There are 50 full-time and 12 part-time faculty based in the architecture programs, 23 of whom are in visiting or adjunct positions. Twenty-eight architecture faculty members are tenured and 12 are full professors. Twenty-three of the above individuals are registered architects.

The student-to-faculty ratio as of spring 2012 is as follows:
-Design studios overall: 16 to 1 (this is down from 20 to 1 in 2006)

-Lecture courses: 68 to 1
-Seminars: 15 to 1

The school has appropriate faculty and staff resources to effectively complete its teaching, research, and service mission. Although economic realities have affected the expansion of the faculty, new positions, some promised before the 2008 economic downturn, have come online since the last NAAB review, and interviews for open faculty positions are scheduled for this spring. The faculty and leadership of the college and university are appropriately stable, ensuring intelligent operations in the School of Architecture + Design and the undergraduate and graduate architecture degree programs. The workloads of faculty members tend to be the traditional "2+2" model prevalent in most architecture programs nationally.

In addition to academic resources, the school has a Design Office staff of 5 members, including a full-time student advisor to meet the request of the last accreditation visit in 2006. The students are further supported by a design shop staff, the international program coordinator, and an IT individual.
An associate professor has been appointed as the IDP education coordinator for the B. Arch. and M. Arch programs. The coordinator communicates regularly with the students via email and in-person meetings.

Faculty are encouraged and financially supported by the dean and director to pursue professional development opportunities, such as sabbaticals, conferences, and individual grants.

The APR thoroughly addresses the EEO/AA policies the university currently has in place. Refer to policy #16 in the College Policy on Diversity, Equity, and Inclusion from the CAUS Policy Handbook. policy #1, "Reappointment, Promotion, and Tenure Guidelines."

2014 Program Response:
An additional tenure-track faculty member, Nathan Heavers, has been hired in the Landscape Architecture program at the Washington-Alexandria Architecture Center (WAAC), beginning in the fall of 2012. While this faculty member will primarily teach students in the Master of Landscape Architecture program, he will also serve as a member of graduate thesis committees for landscape architecture *and* architecture students, relieving some of the burden of thesis committee service for the existing WAAC architecture faculty. Also, with the establishment of a concentration in Urban Design within the Master of Science in Architecture program, to be based at the WAAC, additional faculty resources will be available to M.Arch. students at the WAAC. Prof. Susan Piedmont-Palladino will direct the new Urban Design Program. As this program is intended to have a small cohort of students, Prof. Piedmont-Palladino will continue serve on thesis advisory committees for the WAAC's M.Arch. students. Further, Dr. Markus Breitschmid has relocated from the Blacksburg campus to Alexandria, providing an additional faculty line to support the architecture programs at the WAAC. These staffing changes will allow an expansion of courses available to WAAC students and will decrease the number of thesis committees on which the existing WAAC architecture faculty must serve, reducing faculty workloads to more acceptable levels.

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.

2014 Program Response:
With the relocation of Dr. Markus Breitschmid from Blacksburg to the Washington-Alexandria Architecture Center (WAAC), a new Visiting Assistant Professor, Dr. Laura McGuire, has been hired to teach the History of Architecture sequence (ARCH 3115-16) for the 2014-15 academic year. As a result, the course content of ARCH 3115-16 History of Architecture has been restructured and expanded, and more non-Western examples have been introduced (please see link to course syllabus in the Supplemental Materials section of this Report). In addition, a new required theory course for fourth-year students, ARCH 4114, Ideas, Concepts, and Representations of Architecture, taught at both the Blacksburg campus and at the WAAC, has been established to help provide an overall theoretical framework for the broad range of elective history and theory offerings available to students through ARCH 4214/5134, Topics in Architectural History & Theory. As part of their work for this new course, students will be required to articulate architectural ideas orally, in writing, and through architectural representations such as drawings. Dr. McGuire will teach the course, ARCH 4114, Ideas, Concepts, and Representations of Architecture, at the Blacksburg campus, and Dr. Breitschmid will teach the course at the WAAC.

Additional concerns raised in the 2012 NAAB Visiting Team Report:

I.2.4 Financial Resources: The faculty and administration have identified some specific financial needs. The three needs that are most fundamental to the continued successful operation of the architecture programs are (1) faculty salary funds to compensate for “salary compression” of some faculty members; (2) additional graduate assistantships, which would directly influence the quality of graduate students enrolling in the Master of Architecture degree program; and (3) certain information technology upgrades and staff that would reduce the operational stresses in Blacksburg and increase the interconnectivity between the main campus and the Alexandria Center.

2014 Program Response:
Faculty salary increases were provided by the State and the University for both 2013 and 2014. In addition to increases based on merit, these salary changes included a number of significant equity adjustments to help address some long-standing salary compression issues.

The School proposed and was granted a modest increase in the A+D student program fee and has allocated a portion of the increased revenues toward stipends for new graduate teaching assistantships. It is our hope that this internal investment in graduate education might result in the allocation of additional graduate assistantship resources to the School from the Virginia Tech Graduate School.

A new full-time staff position has been created to enhance support for information and digital technologies in the School of Architecture + Design. This position will report to the Computing Technology Manager, currently the sole individual in the School to support student computing efforts, other than graduate assistants and part-time student wage workers. The new staff position would also provide support for maintenance of the School’s website and other web/file servers. A search is currently underway to fill this new staff position.

With funding from the office of the Associate Vice President for Learning Technologies, new high-resolution video projectors have been installed in classrooms and review rooms in Cowgill and Burchard Halls to better serve architecture courses and studios with the highest quality image display.

Through its annual equipment purchases as part of the Equipment Trust Fund from the State Council of Higher Education for Virginia (SCHEV), the School has requisitioned several additional PolyCom video conferencing units to expand the video/audio interconnectivity

between the School's facilities on the main Virginia Tech campus in Blacksburg, the Alexandria Center (WAAC), and the Center for European Studies and Architecture in Riva San Vitale, Switzerland. Some of these video conferencing units are currently on order and others have already been installed and are currently in use.

I.2.5 Information Resources: The WAAC library is an important resource for students and faculty. The program is aware of the need to expand the collection at this location.

2014 Program Response:
The Washington-Alexandria Architecture Center (WAAC) has recently acquired a significant portion of the book collection of the late Dr. Marco Frascari, former G.T. Ward Professor of Architecture at Virginia Tech, based at the Alexandria Center. The addition of these books has expanded the library collection at the WAAC by approx. 4,000 volumes. The high quality of the collection will provide a significant resource to support research and scholarship for faculty and Ph.D. students, as well as M.Arch. and B.Arch. program students studying at the WAAC.

Realm C. General Team Commentary: ARCH 4044- While most of the items in this Realm are met through the professional practice course, the number of instructors teaching Arch 4044 created a wide divergence in how the various SPCs in this section were covered. Of concern to the team is the wide disparity of range and depth of course content being presented.

2014 Program Response:
The Professional Practice Course Coordinator has convened regular meetings of the various instructors for ARCH 4044/5044G, Professional Practice to ensure that, while teaching styles and formats may differ widely between the various course sections, the course content, especially with respect to the student performance criteria associated with this course, is uniformly covered. As the course is offered every semester during the academic year, at the beginning of each semester, the faculty members teaching ARCH 4044 meet to assess the previous semester's course outcomes and to review and refine the content of the course for the upcoming semester. Instructors teaching the course at the WAAC and as part of the Chicago Studio participate in these sessions via remote video/audio link.

3. Changes or Planned Changes in the Program

2014 Program Update:

Curriculum changes
B.Arch. – Due to the establishment of several new required courses (ARCH 2044, Building Materials, 2 cr. hrs., and ARCH 4114, Ideas, Concepts, and Representations of Architecture, 2 cr. hrs.; please see links to course syllabi in the Supplemental Materials section of this Report), the minimum total number of credit hours required for the B.Arch. degree has increased from 156 to 160. Since in the past most B.Arch. students have graduated with more credits than the minimum, this change is not expected to affect graduation rates or time to degree. The faculty and administration are evaluating the overall number of credits required for the B.Arch. degree and may institute further curriculum changes to keep the total minimum number of credits within acceptable limits.

M.Arch. – Several years ago the graduate faculty dropped the required statics course taught by the Engineering Science and Mechanics department [ESM 3704, Basic Principles of Structures] for the M.Arch.3 program in favor of an experimental course in graphic statics taught by Dr. Mark Schneider, ARCH 5134, Descriptive Geometry - Graphic Statics. In the 2013-14 academic year it was decided after consultation with both Prof. Mehdi Setareh and Prof. Mario Cortes [instructors in subsequent building structures courses] that it was

necessary for graduate students to return to taking the ESM 3704 Basic Principles of Structures course, which was again added to the list of required courses for the M.Arch.3 program. At that time the graduate faculty decided to maintain the graphic statics course that, in conjunction with ARCH 5134, Descriptive Geometry – Stereotomy, was providing an excellent grounding in principles of descriptive geometry for the M.Arch.3 students. Returning to requiring the ESM 3704 course while maintaining the Descriptive Geometry courses increased the minimum number of credits required for the M.Arch. degree for students in the M.Arch.3 program from 81 to 84 credit hours (30 supporting credits + 54 graduate credits). Since in the past most M.Arch.3 students have graduated with more credits than the minimum, this change is not anticipated to affect graduation rates or time to degree.

In accordance with deadlines established in the 2014 NAAB *Conditions for Accreditation*, plans to phase out the non-accredited post-professional M.Arch.1 program option have been updated. An alternate degree proposal will be submitted for approval by University governance and, if necessary, the State Council of Higher Education for Virginia (SCHEV) for implementation once all students admitted to this option, or who were admitted to the B.Arch. program with the intention of pursing the one-year post-professional M.Arch. following completion of their undergraduate studies, have completed their graduate degrees. This will occur no later than June 30, 2018.

In collaboration with the School of Public and International Affairs, a new concentration in Urban Design has been established within the Master of Science in Architecture degree program, providing an advanced graduate study option in Urban Design for graduates of the B.Arch. program, as well as the Bachelor of Landscape Architecture program. This program will be based at the Washington-Alexandria Architecture Center and will be directed by Prof. Susan Piedmont-Palladino. The first MS.Arch./Urban Design degrees will be conferred in the Spring of 2016.

Administration changes

On June 1, 2014, Dr. Timothy Sands, former Provost and Acting President at Purdue University, became the 16th President of Virginia Tech, replacing Dr. Charles Steger, FAIA, who stepped down after 14 years as President. After an international search, Prof. Henri de Hahn became the new Director of the School of Architecture + Design, effective July 10th, 2014. Prof. Hunter Pittman was appointed as Chair of the Graduate Architecture Program, effective July 1, 2014, replacing Prof. Steve Thompson, who stepped down to return to full-time teaching and scholarship after 10 years of service in the chair's position. (Please see links to one-page resumes/bios in the Supplemental Materials section of this Report.) Further program leadership adjustments are contemplated with implementation in the Fall of 2015.

Faculty/staff changes

After serving as a visiting faculty member for several years, Patrick Doan has been hired in a tenure-track position, beginning in the fall of 2012. Mr. Doan has earned NCARB certification and is a licensed architect in Texas and Virginia. He teaches a third-year undergraduate architecture studio and the required Art of Building course (ARCH 2034), and he serves as a fifth-year and graduate thesis advisor for a large number of architecture students. Dr. Laura McGuire, who earned her PhD from the Univ. of Texas, has been hired as a Visiting Assistant Professor to teach the required History of Architecture course (ARCH 3115-16) and the required fourth-year theory course, Ideas, Concepts, and Representations of Architecture (ARCH 4114). (Please see links to one-page resumes in the Supplemental Materials section of this Report.)

A search for a new tenure-track faculty member in the area of architectural history and theory will be undertaken in 2015. The successful candidate will be expected to teach the required History of Architecture course (ARCH 3115-16) and the Ideas, Concepts, and Representations of Architecture course (ARCH 4114) on the main campus in Blacksburg. In

addition, a search to fill a second vacant tenure-track position in the area of urban design will be conducted in 2015 as well, and the successful candidate will teach the required Building Cities course (ARCH 4034). Funding for these positions is covered by previous retirements. No additional faculty retirements have been announced at this time.

Several new staff members to support the architecture program's instructional efforts have joined the School of Architecture + Design since the last accreditation visit. Mr. Ryan Pieper has been appointed as the Shop Manager at the Washington-Alexandria Architecture Center. Mr. Jonathan Rugh has been hired as a Woodshop Craftsman. Mr. Bram Lewis has recently been appointed as the School's Computing Technology Manager.

Changes in enrollment

Enrollments remain stable, with a robust depth of applicant pool both quantitatively and qualitatively. In concert with the Virginia Tech Admissions office, the B.Arch. program will increase its enrollment target for its first time freshmen cohort for Fall 2015 to 120 from 105 (Fall 2014) and 95 (Fall 2013). This will allow slow growth in the five-year undergraduate program, offsetting other factors affecting overall enrollment, allowing the School to fulfill its enrollment management agreements with the University. The Director and program chairs are devising new recruitment strategies to reach out to potential architecture students in order to convert them to prospects with a commitment in having them choose Virginia Tech as their first choice.

New opportunities for collaboration

Discussions are currently underway to offer a new Minor in Building Construction, to be targeted primarily to Architecture students (planned implementation: Fall 2015). Other possible minors are at early stages of discussion.

Changes in financial resources

Overall funding for the program remains stable and appropriate given the need to earmark substantial funding from the required A+D Student Program Fee (differential tuition funding). The College of Architecture and Urban Studies has hired a new Director for Alumni Relations, and she will work with the Director of the School of Architecture + Design in bridging alumni relations with fundraising.

Changes in physical resources

Renovations at the Center for European Studies in Architecture, recently renamed the Steger Center for International Scholarship, in Riva San Vitale, Switzerland, are now complete. Expanded classroom and dining facilties, as well as a new, enhanced studio space for architecture students participating in the Europe Study Abroad Residency Program, are now available.

The University has purchased a new building at 601 Prince Street in Alexandria, Virginia, to accommodate growth in the Landscape Architecture program and the new Urban Design program at the Washington-Alexandria Architecture Center (WAAC). The addition of this new facility will increase the floor area available for architecture studios, classrooms, and faculty offices at the WAAC by approx. 5,000 square feet, helping to address the 2012 Visiting Team’s concern that “the program felt cramped at WAAC.”

Career Opportunities

Beginning in Feb. 2013, the School’s annual Career Day event has been reformulated as the Career Day and Design Expo, including not only professional offices seeking to hire graduating students as architectural interns or continuing students as summer interns, but also material and product manufacturers and suppliers. Presentations by visiting professionals on a variety of topics related to architectural practice are scheduled throughout

the day. The new format is intended to be more enjoyable and educationally rewarding for both students and professionals.

4. Identity & Self Assessment

a. History Mission

The institution now known as Virginia Tech or Virginia Polytechnic Institute and State University, originated as the Olin and Preston Institute, established in Blacksburg, Virginia as a Methodist academy in 1851. With the passage of the Morrill Land-Grant College Act of 1862, the Institute was re-chartered with collegiate powers. In 1872 the name was changed to Virginia Agricultural and Mechanical College. The Corp of Cadets was initiated in 1891, and in 1896 the name was changed to Virginia Agriculture and Mechanical College and Polytechnic Institute, which immediately informally became known as Virginia Polytechnic Institute or VPI.

Some of the early university buildings, especially surrounding the "drill field" at the center of the campus, where the cadets practiced marching in formation, were built from local dolomitic limestone, quarried on or near the campus. This "Hokie stone" has come to represent adherence to tradition at Virginia Tech, and most new campus buildings must include a specified percentage of exterior surface clad with Hokie stone.

Today the University consists of eight colleges: Agriculture & Life Sciences, Architecture & Urban Studies, the Pamplin College of Business, Engineering, Liberal Arts & Human Sciences, Natural Resources and Environment, Science, and the Virginia-Maryland Regional College of Veterinary Medicine. Total student enrollment for 2010-11 was 31,006, with 28,687 on the main campus in Blacksburg. The overall student faculty ratio is 16:1. Virginia Tech offers more degree programs than any other university in the state with 65 undergraduate and 145 graduate programs. The university generated $396.7 million for research programs in fiscal year 2009, ranking it 44th in the nation, according to the National Science Foundation.

Virginia Tech's current Strategic Plan may be found online at http://www.president.vt.edu/strategicplan/strategic-plan.html. The university's Institutional Statement of Mission and Purpose is as follows:

> *Virginia Polytechnic Institute and State University is a public land-grant university serving the Commonwealth of Virginia, the nation, and the world community. The discovery and dissemination of new knowledge are central to its mission. Through its focus on teaching and learning, research and discovery, and outreach and engagement, the university creates, conveys, and applies knowledge to expand personal growth and opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life.*
> (Mission Statement approved by the Virginia Tech Board of Visitors, 6/4/01; revised in 2006.)

Architecture was initially taught at VPI in 1928 as architectural engineering. Clinton H. Cowgill, for whom the current primary facility of the College is named, led the department for 28 years. In 1956, the Board of Visitors authorized the offering of the professional degree of Bachelor of Architecture. That year, Leonard J. Currie became head of the department of architecture in the School of Engineering and Architecture.

In 1964, the Department of Architecture became part of a new College of Architecture under the direction of Dean Charles Burchard, FAIA. In 1973 the College of Architecture became the College of Architecture and Urban Studies and expanded to include the department of Urban Affairs and Planning.

Dean Burchard served the College up to 1979, a period that saw its development into a comprehensive professional school and its emergence as an exemplary and innovative center in architectural education. Dean Burchard oversaw the construction of Cowgill Hall, dedicated in 1970, which remains the home of the College administration and the School of Architecture + Design. In 1983, he was awarded the AIA/ACSA Topaz Medallion for lifelong achievement in teaching, creative work, and service for the advancement of architectural education. Burchard continued to provide inspiration for the program until

his death in 1990. In recognition of his contribution, a new studio and workshop building was dedicated as Burchard Hall in September of 1998.

Among the innovative new faculty that Dean Burchard brought to the school in his early tenure was Olivio Ferrari, who joined the College in 1965. Professor Ferrari, a native of Switzerland, was educated at the Hochschule für Gestaltung in Ulm, Germany, practiced and taught with Max Bill, and taught at the ETH in Zürich and later at Auburn University. Together, Burchard and Ferrari developed a comprehensive plan for revision of the architectural curriculum in 1965 and oversaw its implementation in the following years. Many of the fundamental educational tenets of this plan have continued to guide and inspire the program since. In 1982 Professor Ferrari was awarded the title of Virginia Tech Alumni Distinguished Professor, and in 1990 he received the honor of Distinguished Professor from the ACSA.

After implementation of the Burchard/Ferrari plan, the architecture program was organized into three 2-year divisions. In the first division, the “Foundation,” labs and seminar-workshops were taught as “search courses,” with stress on process rather than solution. Education was to proceed by experimentation and not by reliance on the authority of the faculty. Both the faculty and students were to engage in joint identification of problems and explore processes leading to development. The second two-year division employed the same educational techniques as the first, but challenged students to attain new levels of sophistication and competence, with an emphasis on developing a professional attitude toward design. The content of the labs and workshops included the study of structure, mechanical systems, and building construction. After completing the first and second divisions (four years), students elected to either complete a terminal fifth year and receive a Bachelor of Architecture, or enter the third division, a two-year Master of Architecture program.

The Architecture Europe Study Abroad Program was begun in 1966 by Professors Olivio and Lucy Ferrari and aimed at introducing students to historic and contemporary examples of European architecture and culture. The program continued to flourish under the leadership of Professor Gene Egger, whosecontinuous involvement dates back to 1968.

Aware of its responsibility to address design issues in the context of the city, the College established the Washington-Alexandria Architecture Center in 1980. Directed by Prof. Jaan Holt, the Center provides architecture students with an opportunity to study architectural design in an urban context. The program also affords an opportunity for Virginia Tech students to study in close association with the professional architectural community in Washington and northern Virginia.
Under the leadership of Dr. Charles Steger, FAIA, now the current President of the University, who served as Dean from 1983 to 1993, the architecture program developed its “Second Generation Mission,” which addressed the current needs of the profession and challenges to its future. With this initiative the College increased its research mission, enhanced its technological presence, and reorganized its administration.
Dean Steger authored a statement of the educational tenets of the school. Based on the educational ideas of Gropius and Itten at the Bauhaus and initiated within the College by Burchard and Ferrari, they included: student self-activation, freedom of the student to determine the focus of his or her education, student selfpacing, self-criticism and self-correction, an attitude of constructive discontent, and a commitment to holistic and heuristic learning.

The success of the Europe travel program led to the creation of a University Center for European Studiesand Architecture (CESA) in 1992. Dean Steger, together with Professors Olivio and Lucy Ferrari, were instrumental in the establishment of this Center. Located in the village of Riva San Vitale, on Lake Lugano in the Ticino region of Switzerland, the Center provides a base for the Europe Study Abroad Residency program, as well as accommodating other majors within the University.

In 1993, Dr. Patricia Edwards became Dean. At this time, the architecture program was re-organized as a department within the College, headed by Professor Ron Daniel. During Prof. Daniel’s tenure as department head, the Industrial Design program was established within the architecture department, enrolling its initial freshmen class in 1995.

In 1997, Dr. Paul Knox became Dean of the College. In the 2002-03 academic year, Dean Knox led the College through a restructuring effort, during which the Department of Art and Art History, formerly in the College of Arts and Sciences, joined the College of Architecture and Urban Studies. At the same time, under the leadership of Architecture department head Frank Weiner, the Architecture and Industrial Design programs were joined by the Interior Design program, formerly in the College of Human Resources and Education, to become the School of Architecture + Design, initially led by Weiner. Prof. Scott Poole was selected as director in 2004. In 2007, the Landscape Architecture program, previously a separate department within the College, became a part of the School of Architecture + Design.

During the fall semester of 2002, the Chicago Studio was established by Prof. Kathryn Albright to foster relationships between the School and the professional architectural community in Chicago. An alternative to the traditional design studio that integrates education and practice in a direct way for upper level architecture and design students, the Chicago Studio allows students to spend a semester in Chicago, working closely with local professionals in a studio setting and studying various aspects of professional practice. This initiative received an NCARB Prize in 2005.

Prof. A.J. “Jack” Davis was selected as Dean of the College of Architecture and Urban Studies in the spring of 2007. Under Dean Davis’s leadership, the Department of Art & Art History was reorganized as the School of Visual Arts, and the Dept. of Building Construction established the Myers-Lawson School of Construction, in collaboration with the Construction Engineering and Management program in the Dept. of Civil and Environmental Engineering in the College of Engineering.

Prof. Scott Poole served as Director of the School of Architecture + Design until June 2011, when he left Virginia Tech to become Dean of the College of Architecture and Design at the University of Tennessee. He was succeeded as director by Prof. William Galloway.

The School of Architecture + Design currently offers accredited professional undergraduate programs in Architecture, Industrial Design, Interior Design, and Landscape Architecture, accredited professional graduate programs in Architecture and Landscape Architecture, non-professional and post-professional masters degrees in Architecture and Landscape Architecture, and a PhD in Architecture and Design Research. The School is home to over 1150 students, approx. 725 of whom are in the architecture programs, and to over 80 faculty members.

The primary emphasis of our educational efforts continues to be on the cultivation of each individual student's active and contemplative capacities fundamental to the development of the self-reliance and independence necessary to assume leadership roles in their chosen profession. As a large school, we strive to provide a broad set of availabilities to support student learning, ranging from numerous off-campus programs to a set of well-equipped workshops. The professional curriculum is expanded by these options in the context of the individual responsibility of a student to become an active participant and decisionmaker in his or her own education. The inclusion of the Architecture, Industrial Design, Interior Design, and Landscape Architecture programs within the School of Architecture + Design formalizes our belief in the value of allied disciplines in which students can directly experience a range of analogous modes of thinking and working. Further, architecture students can take advantage of the wide range of educational offerings within the College and the broader University.

As architecture students learn to activate their own unique abilities and capacities, they must also beconfronted with the standards of the profession and challenged by the traditions of excellence inherent in the discipline of architecture. As they mature in their studies, students are guided to pursue the highest aspirations they can identify and to accept professional responsibility for their work. Virginia Tech architecture students routinely win or place in national or international design competitions, and our former students regularly out-perform the national averages on the Architect Registration Exam (ARE). The School of Architecture + Design’s commitment to excellence in professional design education is demonstrated by the high national rankings of its programs. In 2008, our B.Arch. program was rated first among NAAB accredited undergraduate programs in the *DesignIntelligence* rankings, in which leading

firms were queried about which programs have best prepared students for today's and tomorrow's professional practice, andthe M.Arch. program was ranked fifth among NAAB-accredited graduate programs. In 2010, the undergraduate Landscape Architecture program was ranked first in the nation. This year (2011) for the first time, all undergraduate programs in the School of Architecture + Design (Architecture, Industrial Design, Interior Design, and Landscape Architecture) were ranked in the top ten.

The School remains committed to maintaining and advancing excellence in undergraduate architectural education, while simultaneously cultivating outstanding graduate professional and research programs. In recent years, competition for admission to our professional M.Arch. programs has become fierce, and these programs typically vie for applicants with Harvard, Yale, and Columbia universities. Researchoriented and post-professional masters programs have also been strengthened, significantly contributing to the university's research mission. In the fall of 2007, a new PhD program in Architecture and Design Research admitted its first cohort of students, expanding opportunities for advanced study and fostering the development of research and scholarship in architecture and design.

Excellence in research, scholarship, and creative achievement are expected in a comprehensive research university like Virginia Tech. In part through our Center for Design Research, the School is expanding opportunities for both undergraduate and graduate students to participate in important design researchendeavors, including design-build projects, such as the construction of a new farmers' market for the town of Covington, Virginia, and building science research, such as the evaluation of stormwater runoff mitigation by vegetative roofs. Foremost among these efforts has been the LumenHAUS project, winner of the 2010 Solar Decathlon Europe competition, in which seventeen research universities from around the world gathered to demonstrate their solar-powered houses to the public and to compete in ten categories ranging from Industrialization and Market Viability to Solar Systems and Hot Water. In addition to winning first place overall, the LumenHAUS placed first in the Architecture category and second in the Communication and Social Awareness category.

Since returning to the U.S., the LumenHAUS has served as an important outreach vehicle for the School, traveling to a number of venues, including Millennium Park in Chicago and the grounds of Mies van der Rohe's Farnsworth House in Plano, Illinois, where the dual exhibit of the LumenHAUS and Farnsworth House has brought a record number of visitors. Other important outreach efforts of the School of Architecture + Design include the International Archive of Women in Architecture, studio projects serving local communities, and service abroad projects around the world. Such efforts to share the knowledge and abilities of the School's students and faculty members with local, regional, national, and international communities are part of our responsibility to engage in outreach, extension, and service, fulfilling the university's land-grant mission and demonstrating Virginia Tech's motto, *Ut Prosim*, "that I may serve."

The Mission Statement of the College of Architecture & Urban Studies is as follows:

> The mission of the College of Architecture and Urban Studies is to understand, through acts of creation, design, construction, and analysis, the forces that give meaning and value to the built environments that shape our lives.

The current Mission Statement of the School of Architecture + Design is as follows:

> The mission of the School of Architecture + Design is to create a setting for the pursuit of theoretical, practical, and productive knowledge, embracing the duality of the education of an individual and the practice of a profession. The School takes a decidedly Modern position towards design and simultaneously seeks to understand the structure of historical development and culture. The School has a long-standing commitment to international and urban studies through the Washington-Alexandria Architecture Center, the Study Abroad Program, and the University's Center for European Studies and Architecture.
>
> The objective of the School of Architecture + Design is to produce graduates who will be leaders in their chosen professions and in the communities in which they live. The School seeks to

provide a forum that cultivates vigorous dialogue and debate, enriching the interrelations between education and practice. (adopted 2003)

An initial draft for a new mission statement for the School of Architecture + Design has been produced, based on discussions between a number of faculty members over the 2010-11 academic year. Further discussions with faculty and students will be conducted during the current academic year, and, when all are satisfied, the updated mission statement will be adopted.

2014 Program Update:
With the installation of the new University President, plans are underway to begin a process to revise the University's Strategic Plan, including its Statement of Mission and Purpose. Following this process, Colleges will be asked to update and revise their Strategic Plans to conform with the priorities of the new University Strategic Plan. Also, with the recent arrival of a new Director of the School of Architecture + Design, plans are being developed to initiate a series of faculty discussions regarding the future direction of the School and its programs. These discussions will include a review of the School's current mission statement, as well as previously proposed revisions.

b. Responses to the Five Perspectives

A. Architectural Education and the Academic Community

Since the architecture programs were joined with other design-related programs to form the School of Architecture + Design in 2003, we have enjoyed a number of important successes. Accomplishments of the School's faculty and students, such as the high national rankings of the Architecture and related design programs and the recent success of the LumenHAUS project at the Solar Decathlon Europe, have greatly enhanced the School's reputation within Virginia Tech and within the broader academic context of schools of architecture worldwide. The formation of the Center for Design Research, as an "umbrella" under which our some of our various research efforts can be collectively identified, as well as a general increase in faculty productivity in research and scholarship, has improved the standing of all the School's programs with respect to the measures used by the university administration to track the performance of academic units at Virginia Tech.

The School of Architecture + Design is highly regarded within the university community, and we continue to strive to advance the level of understanding of the role a professional program in a research-oriented, landgrant institution. The university administration – President Charles Steger, FAIA (former Dean of the College of Architecture and Urban Studies) and Provost Mark McNamee – have been very supportive of the Architecture program. Nevertheless, higher education is under constant scrutiny, and it is increasingly important that we clearly demonstrate our value to the university community and the Commonwealth of Virginia.
The Architecture Program attracts many of the best academically prepared students in the university. For Fall 2010, the average SAT score and high school grade point average for students offered undergraduate admission to the architecture program were 1323 (critical reading and mathematics only) and 4.23 respectively. It is typical for the undergraduate architecture program to have the most honors eligible freshmen among all of the majors in the university. Over half of incoming freshmen are from outside the Commonwealth of Virginia. The Master of Architecture degree program attracts a broad range of national and international applicants from a wide variety of academic backgrounds. Chosen from approximately 500 applicants, the typical entering class (25 in M.Arch.3 and 25 in M.Arch.2) demonstrates its academic excellence through Graduate Record Exam scores averaging from 1150 to 1250 out of 1600 points (verbal and math only), grade point averages in former degrees from 3.4 to 3.6 out of 4.0, and excellent portfolios from previous academic and professional work. Over the past 5 years we have admitted 2-3 Fulbright Scholars annually.

Undergraduate students must participate in the Curriculum for Liberal Education, engaging the educational offerings of the larger university. In addition, the requirements for the B.Arch. degree include

six additional credit hours of coursework in Humanities, Social Science, and/or Physical Science beyond the requirements of the Curriculum for Liberal Education. Students also use free electives within the requirements for their degree to pursue study outside the School of Architecture + Design. Approx. 25% of students in the B.Arch. program obtain minors in other areas within the School, College, or University. Popular minors for Architecture students include Industrial Design, Landscape Architecture, Building Construction, History, Public and Urban Affairs, Psychology, Real Estate (College of Business) and Foreign Languages.

There are 50 full-time and 12 part-time faculty serving the Architecture program. Twenty-eight of these fulltime faculty are tenured and 12 are full professors. In addition, the School of Architecture + Design provides an extended learning community, including 23 full-time and 6 part-time faculty members in the Interior Design, Industrial Design, and Landscape Architecture programs. Faculty often collaborate with colleagues in other programs within the School, College, or University on research projects, exemplified by the LumenHAUS, winner of the 2010 Solar Decathlon Europe. The LumenHAUS project involved collaboration between the School of Architecture + Design, the Dept. of Building Construction, the Depts. of Mechanical Engineering, Electrical Engineering, Industrial and Systems Engineering, and Computer Science in the College of Engineering, and the Dept. of Marketing in the College of Business.

Two prestigious awards were recently conferred on architecture faculty members by the Association of Collegiate Schools of Architecture (ACSA). Professor Robert Dunay, T.A. Carter Professor of Architecture, was honored with the ACSA 2010-11 Distinguished Professor Award for his sustained creative achievement and advancement of architectural education. Prof. Dunay is the second Virginia Tech faculty member to receive this honor, with Olivio Ferrari being the first in 1988. The ACSA also honored Jim Bassett, Assistant Professor of Architecture, with the ACSA/AIA 2010-11 New Faculty Teaching Award for demonstrated excellence in teaching performance during the formative years of a teaching career.

The search process for new tenure track faculty is extremely rigorous and competitive. It is typical to have 100 or more applications for a vacant position and, increasingly, these applications are from highly qualified individuals. Faculty members must meet high standards in the areas of learning, discovery, and engagement for promotion and tenure. Architecture and design faculty actively contribute to university governance through service on university committees and commissions.

The School enjoys extraordinary physical facilities, including studios, classrooms and lecture halls, and workshops, shared between the Architecture, Interior Design, Industrial Design, and Landscape Architecture programs (see section I.2.3 Physical Resources). The Art & Architecture Library, a branch of the University Library system, is housed in the architecture building, Cowgill Hall, further enhancing the educational environment of the School (see section I.2.5 Information Resources). School-wide lectures are frequently attended by students outside the School, and architecture students frequently participate in academic and cultural activities across the campus. In addition to facilities on the main campus, the School of Architecture + Design has teaching and research centers in the Washington, DC metropolitan area – The Washington-Alexandria Architecture Center – and a small European town – The Center for European Studies and Architecture (CESA) in Riva San Vitale, in the Canton of Ticino, Switzerland. The latter is shared with the colleges of Business and Liberal Arts and Human Sciences.

2014 Program Update:

The national rankings of the Architecture and Design programs continue to maintain the high standing in which the School's programs are held within the University. Along with several disciplines within the College of Engineering, the incoming freshmen class in Architecture possesses the highest grade-point averages and SAT scores among all undergraduate majors at Virginia Tech. Over half of incoming freshmen continue to be admitted from out-of-state.

Architecture faculty have continued to engage with faculty in other disciplines within the university on research and creative projects, often through the university's Institute for

Creativity, Arts, and Technology (ICAT) and the Institute for Critical Technology and Applied Science (ICTAS). Along with Dr. Tom Martin (Electrical and Computer Engineering), Architecture Assistant Professor Paola Zellner Bassett received the University's 2014 XCaliber Award for excellence as an interdisciplinary team making outstanding contributions to technology-enriched learning activities.

Facilities serving the architecture programs at the Washington-Alexandria Architecture Center and at the Center for European Studies and Architecture in Riva San Vitale, Switzerland, have recently been expanded and upgraded.

B. Architectural Education and Students

The Architecture Program at Virginia Tech strives to create an environment where each student's unique abilities and capacities can be activated, while challenging them with the standards of excellence and achievement that are inherent in the discipline and the profession of architecture. Students are encouraged to accept a degree of responsibility for their own education, and the level of responsibility increases as thestudent progresses within the program culminating in a self-directed thesis in both the undergraduate and graduate programs. A wide range of opportunities supports this independence of thought and action:

- Study in urban settings, such as the Chicago Studio or the Washington-Alexandria Architecture Center, where students may study with other architecture students and faculty in an international consortium of schools;
- Study abroad opportunities, such as the Europe Travel Program and the Europe Residency Program at the Center for European Studies and Architecture in Riva San Vitale, Switzerland, coordinated within the curriculum structure to enhance an awareness in the student's education of global cultural differences;
- A professional Extern program that provides a valuable link between the academic environment, and architectural offices throughout the world;
- State of the art computing and rapid prototyping facilities;
- Workshops and laboratories for woodworking, metalworking, plastics, ceramics, printmaking, textiles, and photography;
- Involvement in design research endeavors, including design-build and building science research projects;
- An extensive collection of research and study materials in the Art & Architecture Library, including an extensive set of architect's working drawings of significant buildings;
- Regular contact with practicing professionals, including alumni, internationally prominent visiting professionals, and lectures by prominent architects, designers, and artists, as well as individuals from a variety of other disciplines;
- Opportunities to participate in projects serving communities locally, regionally, nationally, and internationally.

The School provides financial support for the Virginia Tech Chapter of the American Institute of Architecture Student (AIAS) and other student organizations and supports undergraduate and graduate students to present papers at academic and professional conferences.

Academically, students may draw on the expertise of over 80 faculty members within the School, from 16 ountries, educated at major institutions throughout the world, as well as the interdisciplinary resources of over 50 additional faculty in the College of Architecture & Urban Studies – the School of Public and International Affairs, the School of Visual Arts (Art & Art History), and the Myers-Lawson School of Construction (Dept. of Building Construction).

2014 Program Update:
A wide array of opportunities in the School of Architecture + Design exist for students to engage in activities that contribute to their education. Students continue to engage in the

School's off-campus study program offerings, with approx. 80% of 4th-year architecture students participating. The School's workshops and digital fabrication facilities continue to be enhanced with new, state-of-the-art equipment. Architecture students can participate in the newly reinvigorated chapter of the American Institute of Architecture Students (AIAS). Students have formed the Digital Mentorship Collaborative (DMCO) to engage students, faculty, and alumni in a dialogue regarding digital tools. Numerous opportunities also exist for students to engage in community outreach projects through the design/buildLAB or through the campus chapter of Habitat for Humanity. A wide array of visiting lecturers is brought to Blacksburg every semester to invigorate the dialogue on architecture in the studios and to connect the students to the broader discipline.

C. Architectural Education and the Regulatory Environment

The accredited architectural programs at Virginia Tech are structured to prepare graduates with the essential skills and conceptual background necessary to become licensed practicing professionals. Courses and design laboratories within the professional curriculum are designed to cultivate an appreciation and understanding of the traditions and historical forces that give meaning and value to the built environment, to develop building and site design abilities, and to foster an understanding of and specific techniques for addressing functional criteria, environmental concerns, life-safety, use of building materials and construction methods, structural integrity, the impact of standards and regulations on construction, and the professional/ethical responsibilities of an architect.

The School's Intern Development Program (IDP) Educational Coordinator presents the process of IDP, as well as licensure and registration, to students at multiple times during the academic year (for more information, see section I.2.1 Human Resources and Human Resource Development, Student Support Services). The Professional Practice Seminar addresses various frameworks of architectural practice in combination with presentations from an array of practitioners from across the country. Practitioners describe how their offices mentor interns and support their efforts towards licensure. A portion of this Professional Practice course, “Designing Practice,” was recognized in the 2011 NCARB Prize Competition for Creative Integration of Practice and Education in the Academy as the Grand Prize winner (more information on the 2011 NCARB Prize competition may be found in the next section, I.1.3.D Architectural Education and the Profession). Professors Robert Dunay, FAIA, Joe Wheeler, AIA, Robert Schubert, and Chip Clark also received an 2011 NCARB Prize Honor Award for “A Sustainable, Net Zero Energy Dwelling.” This was the first time in the history of the competition that two teams from a single school won NCARB Prize awards.

Multiple opportunities exist within the curriculum for students to engage with licensed architects in a professional office setting. In the fourth year of the undergraduate program, students may elect to participate in the Professional Extern Program, attend the Virginia Tech Washington-Alexandria Architecture Center, or participate in the Chicago Studio, offering opportunities for students to work full or part time with practicing professionals. At any time in the undergraduate and graduate program, students may elect to work part time with the College’s Community Design Assistance Center providing nonprofit organizations with pre-professional assistance with their architectural, landscape and planning needs.

Graduates from Virginia Tech’s architecture program have historically had an excellent record of success on the Architect Registration Examination (ARE), consistently performing at or above the national average in all of the ARE test divisions (see Supplemental Information, section IV.6 for a table showing ARE pass rates for Virginia Tech graduates, compared to national averages in each test division).

2014 Program Update:
The School remains committed to preparing future professionals for practice as licensed architects. The School's IDP Coordinator continues to hold meetings throughout the academic year to encourage students to become aware of and participate in professional development activities, as well as to inform students of changes to licensing processes. The number of Virginia Tech architecture graduates taking the Architects Registration Exam

(ARE) each year remains high, with participation levels approaching nearly 100%. 2013 pass rates for the ARE for Virginia Tech graduates exceed the national average in every category, exceeding the national average pass rates by over ten percentage points in all but one category.

D. Architectural Education and the Profession

A fundamental goal of the School's curriculum is to provide students with the intellectual and operational skills necessary to assume leadership roles in the architectural profession. It is our obligation to ensure that our graduates are prepared to function as professionals with exemplary ethical and aesthetic judgment in a context of global practice, cultural diversity, changing regulatory demands, and an expanding knowledge base.

Virginia Tech is located in the mountains of southwestern Virginia, some distance from major metropolitan areas. Nonetheless, our students have a broad range of opportunities to engage the profession, and professionals have a number of opportunities to establish short and long term relationships with the School. The world is brought to Blacksburg in the form of lectures, seminars, critiques, workshops, and teaching by visiting practicing professionals. Students may engage the broader world through off-campus programs in the U.S. and abroad. In addition to offerings at the main campus in Blacksburg, our architectural programs extend to the Washington-Alexandria Architecture Center in Alexandria, Virginia and the Chicago Studio in Chicago, Illinois, allowing students to work part time with practicing professionals (see section II.2.2 Professional Degrees and Curriculum, Off-Campus Programs). The Europe Study Abroad Travel Program and the Residency Program at the Center for European Studies and Architecture in Riva San Vitale, Switzerland allow students to experience European architecture and engage with practicing professionals in the context of global practice. The professional Extern program provides opportunities for students to directly engage in everyday architectural practice in an integrated way by working in an architect's office as a full-time intern for a semester and earning academic credit under the guidance of a faculty advisor.

The preparation for the profession that our students receive has been recognized by practitioners nationwide in the *DesignIntelligence* rankings of accredited architecture programs. In 2008, the undergraduate architecture program was ranked first among NAAB-accredited B.Arch. programs, and the graduate program was ranked fifth among NAAB-accredited M.Arch. programs. In 2009, Virginia Tech's Architecture program was recognized as one of America's World-Class Schools of Architecture with highest distinction, tied for the top honor with Harvard, Yale, and Columbia Universities. This multidimensional ranking by *DesignIntelligence* was based on five criteria: current rankings by professional practices; historic 10-year rankings by professional practices; rankings by academic department deans and chairs; overall campus environment and student evaluations; and program accreditation. In the 2011 *DesignIntelligence* rankings, the undergraduate Architecture program is tied for #4, and the graduate Architecture program is ranked #12. The 2011 Architecture Skills Assessment ranking, which surveys both undergraduate and graduate programs, lists Virginia Tech #2 in Construction Methods and Materials, #4 in both Analysis and Planning and in Sustainable Design Practices and Principles, and #5 in Computer Applications and in Communication.

Over the course of the past few years we have continued to actively explore innovative curricular initiatives to strengthen our ties to the profession. This year, a team from Virginia Tech was awarded the Grand Prize in the 2011 NCARB Prize Competition for Creative Integration of Practice and Education in the Academy for the project, "Designing Practice," submitted by A+D Professors of Practice Marie and Keith Zawistowski. The project engaged students in the subject of professional practice by introducing it as a design problem – an innovative means to make the subject relevant to students. The highly interactive academic course exposed architecture students to real and virtual aspects of running their own firms. The course involved architects, attorneys, business consultants, and registration board representatives. The course investigated topics such as the architect's image in today's culture, the internship and licensure processes, how registration boards work, entrepreneurship, compensation by clients, risk management, construction contract administration management, ethics, and people skills.

The Industrial Design, Interior Design, and Landscape Architecture Programs, housed together with the Architecture Programs in the School of Architecture + Design, bring pertinent, interdisciplinary issues to bear on the architecture curriculum. Special multidisciplinary projects and studios, with intense focus on the interaction of people with objects and interior and exterior environments, combined with the cultural, technological, business, ergonomic, ecological, and social factors that influence design, add a unique perspective and professional relevance to the architectural curriculum, highlighting the collaborative roles and responsibilities of the design professions.

The School is committed to supporting learning beyond the university academic setting, and architecture faculty offer continuing education programs to interns and practicing professionals in architecture as well as allied disciplines. Between 2006 and 2011 faculty have offered a number of continuing education courses that meet the continuing education criteria for the American Institute of Architects, including "International Architecture and Design," an annual week-long travel/study program based at the University's Center for European Studies and Architecture, led by Professors Dunay and Davis, "The Majesty of Peru," a travel/study program to Peru, including a visit to Machu Picchu, led by Professor Humberto Rodriguez-Camilloni, "Structural Technology for Interns and Practicing Architects," conducted by Professor Mehdi Setareh, and the "ARE Building Systems Test Prep Seminar," AIA New York Chapter (May 2011), led by Prof. Michael Ermann.

When appropriate, continuing education credit is also offered for special events, lectures, symposia, etc., sponsored by the School. Each year the School collaborates with the Blue Ridge Chapter of the AIA on an annual lecture, approved for AIA Continuing Education credit. Lecturers in the School of Architecture + Design/Blue Ridge AIA Lecture Series 2006-2011 have included: Jeanne Gang, Studio Gang (2006), Joshua Prince-Ramus, Ramus Ella Architects (REX) (2007), Randall Stout (2008), Marlon Blackwell (2009), and Allison Williams, Design Principal, Perkins & Will (2011). The annual Architecture + Design Career Day has proven to be an important avenue of communication between the School and the profession, with as many as 102 firms participating in the Spring of 2008.

The School's Advisory Board is comprised largely of Virginia Tech alumni who have become important members of the architecture and design professions. This group meets on the Virginia Tech campus at least once per academic year to discuss current developments in professional practice. Initiated by the School's Advisory Board, in May of 2008, the School sponsored the Integrated Design Think Tank, held at the Finnish Embassy in Washington, DC. Prominent practitioners from fields that ranged from creatively promoting products to innovative means of fabrication discussed contemporary issues affecting their practices and the role of inventive thinking in their approach to those issues. This symposium became an opportunity for selected architecture students, faculty, and administrators to consider future directions of the architecture and design professions. (http://archdesign.vt.edu/events/symposia/735)

2014 Program Update:
Professionals continue to rank Virginia Tech's architecture programs among the best in the nation at preparing students for practice. Off-campus programs such as the Chicago Studio provide venues for 4th-year architecture students to participate in architectural practice, mentored by professionals in some of the most well-regarded architectural offices in the nation. Students can participate in opportunitiues such as the Emerging Leaders in Architecture program, sponsored by the Virginia Society of the AIA. The School's Advisory Board has remained deeply engaged in the life of the School, leading aspects of the annual Career Day and Design Expo and participating in mentoring sessions for students on a wide array of topics related to practice.

E. Architectural Education and the Public Good

The School encourages students and faculty to pursue projects that can have a positive impact on communities through design. We take seriously our role in the world outside Virginia Tech in providing service, in fulfillment of the university's motto, *Ut Prosim*, "that I may serve." Service activities are

coordinated with the curriculum structure to provide students with opportunities to ground themselves in their immediate surroundings as well as establish awareness of global cultural differences. Opportunities have been offered to encourage students to contribute, through service, to their community, to the Commonwealth of Virginia, and the world at large. Some examples of the School's service and communityengagement projects include:

- In 2007-08, 5th-year Architecture students Dan Gussman and Brandon Lingenfelser designed and built a modular home for the local Habitat for Humanity affiliate. They were assisted by many other architecture students who participated in the construction effort. Architecture faculty and students often work with the Virginia Tech Campus Chapter of Habitat for Humanity and its local affiliate, New River Valley Habitat for Humanity. Since its founding by Prof. Jack Davis in 1987, the Virginia Tech Campus Chapter of Habitat for Humanity has typically selected a faculty member in the College of Architecture and Urban Studies as its faculty advisor, and many Architecture students have served as chapter officers.

- During the 2010-11 academic year, a group of third-year students engaged in a special studio to design and construct a new farmer's market for the town of Covington, Virginia.

- Chesapeake Bay Foundation Sponsored Studio – In the Spring of 2011, Virginia Tech architecture and design students participated in a design charette sponsored by the Chesapeake Bay Foundation (CBF) to design a new environmental center and office building near Virginia Beach, VA for the CBF.

- During Spring Break of 2009, a group of Architecture and Landscape Architecture students and faculty traveled to the Dominican Republic to build a playground for the local primary school serving the squatter settlement of Verón, near the tourist resort area of Punta Cana. The playground had been designed by a group of architecture and landscape architecture students during the fall semester ofv2008. The students were joined in the construction effort by a group of Virginia Tech alumni.

- On multiple occasions, through the professional Extern program and as a special summer study option, architecture students have participated in programs sponsored by SouthCoast design/build, based in Pass Christian, Mississippi. Students have worked on projects to rebuild communities devastated by the effects of Hurricane Katrina. SouthCoast design/build (http://www.southcoastdesignbuild.org/) is directed by Architecture alumna Leah McBride (B.Arch. '04), NCARB, LEED AP.

2014 Program Update:
Community outreach projects sponsored by the School include the design/buildLAB, engaging the economically-challenged, post-industrial community of Clifton Forge, Virginia, through community service design/build projects, such as the award-winning Masonic Amphitheatre, the Virginia Tech chapter of Architecture for Humanity, Hokies for Haiti, a group of architecture and building constructions students engaged in designing and building a school for a remote Haitian village, and KaTO, a VT alumni-led effort to engage architecture students with communities in Central America in designing and building needed infrastructure for under-privileged cultures.

c. Long Range Planning

The process of forming the School of Architecture + Design was a unique opportunity for establishing a plan for the future development of the architecture and design programs involving a majority of the faculty in Blacksburg and Alexandria. The process began in the winter of 2002 and continued through mid-summer of 2003, when the School proposal was adopted. The creation of the School proposal included a number of weekend work sessions in the winter and spring of 2003. The process involved general discussions regarding the overall objectives of the School with focus groups working on specific parts of

the proposal. Each of the focus groups reported their findings to the faculty as a whole. The intense work involved in this process generated many productive collegial discussions. Three primary goals were developed in accordance with the primary goals and objectives of the Virginia Tech Strategic Plan. These goals continue to guide the School as it enters its ninth year:

- Goal #1: Build upon the high national rankings of the School's constituent programs to enhance `its national and international recognition for education in architecture and design. [Goal #1 is related to the overall goal of the Virginia Tech Strategic Plan which states that "Virginia Tech will be ranked among the Top-30 universities by 2010."]

  Measure: External publications and recognition of student work and pedagogical methods, and enhanced national reputation and ranking for each of the individual programs in Architecture, Industrial Design, and Interior Design.

- Goal #2: Establish the School as a premier international center for design research through innovative research and outreach projects [Goal #2 is related to the Virginia Tech Strategic Plan, Goal 1, Section 1.2, which states that VT will "increase the quality, scope and focus of research and scholarship to match the characteristics of universities ranked 31-40."]

  Measure: Increase scholarly, creative, research and outreach projects receiving external recognition.

- Goal #3: Increase sponsored project activities with an emphasis on applied research. [Goal #3 is related to the Virginia Tech Strategic Plan, Goal 2, Section 2.1, which states that VT will "increase research expenditures by 10-12% per year to reach Top-40 status by 2006."]

  Measure: Increase proposals for sponsored research projects authored by School faculty by 20% per year and increase sponsored research funding by 12% per year over a four-year period.

In addition, a number of new initiatives were put forward as part of the School proposal:

- Establish the *Virginia Center for Design Research*
- Create a new Master of Industrial Design degree program
- Develop Interdisciplinary Research/Outreach Studios for upper-year undergraduate students
- Establish a *Faculty Research Development Institute*
- Increase the capacity of the existing Master of Science in Architecture program to support research
- Increase opportunities for Doctoral study in Architecture and Design
- Establish a *Summer Institute for Architecture and Design Education*
- Establish a Masters program in Urban Design
- Create an undergraduate Minor in Urban Design

During the 2011-12 academic year, the faculty of the School of Architecture + Design will convene in multiple venues to begin to develop the next plan for the development of the School. This will occur in concert with the development of Virginia Tech's new Strategic Plan, currently underway. As in 2002-03, the School's long-range planning efforts will involve discussions with faculty, students, and professional staff members within the School, the Virginia Tech Office of Academic Assessment, senior administrators within the College and University, alumni and other practicing professionals, including the School's Advisory Board, and educators at other Schools of Architecture across the nation, and will consider a wide range of information sources, including publications by the American Institute of Architects, NCARB, the U.S. Bureau of Labor Statistics, and other independent research groups, to assess future trends and long-term directions within the architecture and design professions.

2014 Program Update:
In 2013, the faculty identified a number of areas for which discussion groups could be created to outline the future direction(s) of the School. These areas are: 1) academic programs, degrees, and curricula; 2) the design lab/studio, including the current structure of the first year focusing on foundation design studies; 3) off-campus/study abroad programs; 4) research priorities; 5) outreach and professional/community service programs; and 6) administrative/program structure. Faculty members self-selected the particular discussion area(s) in which they would prefer to participate, and discussion groups of approx. 10 to 15 individuals were formed. It was subsequently decided to postpone these discussions so that the new School Director could participate in leading the discussions.

d. Program Self-Assessment

The School's self-study methods are both informal and formal. The informal element is a normal part of our program operation. There is an "open door" policy in the administrative offices and daily interaction occurs between students, faculty, and administrators. We constantly question what we are doing, evaluate the results of our efforts, and regularly exchange ideas for improvements in our curriculum and our approach to teaching. Informal daily discussions for program development and curriculum improvement are formally developed and documented as required by College policies and University governance. Formal course proposals are written, reviewed, and edited with participation of faculty in each of our programs. These are reviewed and approved by the School of Architecture + Design Curriculum Committee before being referred to the College Curriculum Committee for approval and entrance into the university-level curriculum approval process. This method of informally developing ideas, followed by formal documentation is efficient and effective. Throughout the process, faculty and administrators seek advice of students, alumni, and professionals, as well as faculty colleagues at other Schools.

During the 2008-09 academic year, faculty in the School of Architecture + Design, as well as a subset of Architecture program faculty, initiated a series of discussions reviewing the curriculum, our shared pedagogy, and the structure of the academic programs. Meetings were held weekly throughout the Fall semester. In addition, during the 2010-11 academic year, faculty in the 3rd year of the undergraduate architecture program engaged in a comprehensive review of the curriculum of this crucial year of the program. These discussions highlighted a number of issues related to curriculum and program structure that will be taken up during the current strategic planning process.

The College of Architecture and Urban Studies Policy #15 specifies procedures for review of academic programs within the college. For programs that undergo periodic accreditation reviews, a formal assessment is conducted by the Dean's office following the conclusion of the normal accreditation review process. The outcome of the accreditation review in the form of the Visiting Team Report is reviewed in the broader context of the college and university strategic plans, availability of resources, and projected future directions of the professions.

The Office of Senior Vice President and Provost, Virginia Tech's chief academic officer, constantly assesses the performance of academic programs university-wide. These evaluations are formalized in a "Metrics Report" containing data regarding resources, faculty workload, and student outcomes. The results of this study are used to allocate resources related to new initiatives and programs. Generally, the senior administration of the university has been very receptive to new initiatives proposed by the School of Architecture + Design. While budgets have been reduced university-wide over the past few years, it has been possible to maintain the School's budget in a relatively stable state, due to the institution of a special fee for all architecture and design students. (for more information, see I.2.4 Financial Resources)

All courses and studios within the School of Architecture + Design must be evaluated by students each semester, in accordance with College policy #5. The results of these "Student Perceptions of Instruction" are distributed to each faculty member and also become part of the faculty member's annual review by

their program chair. A summary of a faculty member's teaching evaluations are a required part of the dossier submitted for promotion and tenure reviews.

Each spring, the Virginia Tech Office of Academic Assessment conducts the "Senior Survey," a comprehensive survey of all graduating undergraduate students. Results are compiled and distributed to each college and then to the various departments and schools. This data is an important measure of the satisfaction that students feel with regard to their education. Our students generally rate their educational experience very highly. In part due to the results of this survey, which revealed that students were sometimes receiving conflicting advice concerning academic issues, the faculty and administration have made adjustments to the School's advising scheme since the last accreditation visit to better serve students' needs.

In the summer of 2006, following the last accreditation visit, the School posted an alumni survey on its website. A mailing to all the School's approx. 4000 alumni notified them of the survey and supplied the URL. The survey was available between 2006 and 2011, with the majority of responses occurring immediately following the initial mailing. 31% of respondents had graduated within the previous five years, and 61% had graduated between 1976 and 2000. 87% had graduated from the Architecture program. Although the response rate was generally low, the survey results indicate that the vast majority of former students were satisfied with their education, with 95% answering "yes" to the question, "If you had to choose an undergraduate major again, would you choose Architecture + Design?" In addition, of the architecture program graduates responding, 55% indicated that they were licensed as an architect. Of those not licensed, 79% indicated that they intended to pursue licensure.

In the summer of 2005, the School's Advisory Board was reformulated. Comprised largely of Virginia Tech alumni who have become important members of the architecture and design professions, the Advisory Board is an important part of our self-study process. In addition, we have given new emphasis to meeting with alumni groups throughout the country. It is our aim to have alumni increasingly involved in the life of the School. Toward that end, we established an alumni lecture series in order to allow greater interaction between alumni, students, and faculty. In the Fall of 2010, the Alumni Lecture Series brought nine prominent Virginia Tech Architecture alumni to campus for school-wide lectures on the current state of architectural practice.

Recent Progress Toward 2003 Goals and Initiatives:

Particularly important in our self-assessment is progress toward the goals and initiatives identified in the 2003 Proposal for the School of Architecture + Design (see also prev. section I.1.4 Long-Range Planning).

Goal #1: Build upon the high national rankings of the School's constituent programs to enhance its national and international recognition for education in architecture and design.

Measure: External publications and recognition of student work and pedagogical methods, and enhanced national reputation and ranking for each of the individual programs in Architecture, Industrial Design, and Interior Design.

Progress toward Goal #1, 2005-2011

NATIONAL RANKINGS	2005	2006	2007	2008	2009	2010	2011
Undergraduate Architecture Program (B.Arch.)	10	7	4	1	2	4	4
Graduate Architecture Program (M.Arch.)			10	5	6	8	12
Undergraduate Interior Design Program	13		7	5	9		6
Graduate Interior Design Program		9	5	7	6	7	9

Undergraduate Industrial Design Program				14	13	11	10
Undergraduate Landscape Arch. Program	14	8		15		1	3
Graduate Landscape Arch. Program		14		10		2	4

Based on annual rankings by *DesignIntelligence*, which conducts an annual survey of "firm leaders who, during the past five years, have had direct experience in the hiring and performance of recent architecture graduates. Leading firms were queried about which accredited programs have best prepared students for today's and tomorrow's real- world practice."

External recognition has also come in the form of honors and awards for architecture faculty, for example:

> Two prestigious awards were recently conferred on architecture faculty members by the Association of Collegiate Schools of Architecture (ACSA). Professor Robert Dunay, T.A. Carter Professor of Architecture, was honored with the ACSA 2010-11 Distinguished Professor Award for his sustained creative achievement and advancement of architectural education. The ACSA also honored Jim Bassett, Assistant Professor of Architecture, with the ACSA/AIA 2010-11 New Faculty Teaching Award for demonstrated excellence in teaching performance during the formative years of a teaching career.
>
> Two teams from Virginia Tech won prizes in the 2011 NCARB Prize Competition for Creative Integration of Practice and Education in the Academy. This marks the fifth time that teams from the School of Architecture + Design have won honors in this national competition. This year, Virginia Tech won the Grand Prize of $25,000 for the project, "Designing Practice," by A+D Professors of Practice Marie and Keith Zawistowski. Professors Robert Dunay, FAIA, Joe Wheeler, AIA, Robert Schubert, and Chip Clark also received an NCARB Prize Honor Award for "A Sustainable, Net Zero Energy Dwelling."

Students in the accredited architecture programs have also recently received the following honors and awards:

> Undergraduate Architecture student Keith Stricker received an Undergraduate Award for Excellence in Design from the Maryland Society of the American Institute of Architects (AIAMD) in the fifth annual 2011 AIA Maryland Student Design Awards Competition.
>
> Alireza Borhani Haghighi, a M.Arch. 2 graduate student, received a 1st Place Award for his research poster, "Setting the Scene of Water in Persian Landscape" at the 27th Graduate Student Assembly (GSA) Annual Research Symposium.
>
> 2nd-year undergraduate architecture student Christopher Morgan won a 2010 international student design competition, sponsored by the Royal Institute of British Architects, to design the Yéle Music Studio in the Cité Soleil area of Port-au-Prince.
>
> Meredith Baber, a 4th-year Honors Architecture student, became the first student in the history of Virginia Tech to win a prestigious Kohn Pederson Fox (KPF) Associates Travelling Fellowship in 2009.
>
> Undergraduate Architecture student Ji Ae Kim was awarded 2nd place in the annual "It's Your Light" student design competition sponsored by Luraline in 2008.
>
> Nathan Williams, a third year undergraduate architecture student, was selected as one of two grand prize winners from over 200 entries in the national 2007 Jeld-Wen Design a Door Contest.

Goal #2: Establish the School as a premier international center for design research through innovative research and outreach projects.

Measure: Increase scholarly, creative, research and outreach projects receiving external recognition.

Progress toward Goal # 2, 2006-2011

In addition to external recognition of research, scholarly, and creative projects by individual faculty members, the following School-sponsored design research and outreach projects have recently received external recognition:

> The LumenHAUS project was selected as the overall winner of the 2010 Solar Decathlon Europe competition. This project also recently received a 2011 NCARB Prize, as well as a statewide AIA design award (2011).
>
> Third-year students and faculty who engaged in a special studio to design and construct a new farmer's market for the town of Covington, Virginia were recently honored with a statewide AIA design award (2011).
>
> Architecture + Design faculty member Matt Lutz and architecture graduate students Nathan King and Chip Clark received the 2009 XCaliber Award for the P.L.U.G. project (Portable Laboratory on Uncommon Grounds), a prototype laboratory for use in isolated settings that they designed, developed, and deployed. Currently the P.L.U.G. is being used in the field by university researchers studying chimpanzees in remote areas of Tanzania.
>
> The "Meditation Room," part of the *Extreme Makeover: Home Edition* Crawford Residence project in Blacksburg, designed by Architecture faculty members Robert Dunay and Joe Wheeler, with assistance from Building Construction Prof. Michael O'Brien and Landscape Architecture Prof. Ben Johnson, received regional and statewide AIA design awards.

Goal #3: Increase sponsored project activities with an emphasis on applied research.

Measure: Increase proposals for sponsored research projects authored by School faculty by 20% per year and increase sponsored research funding by 12% per year over a four-year period.

Progress toward Goal # 3, 2006-2010

Since the last accreditation visit, faculty in the School of Architecture + Design have continued to increase sponsored research activity. In the 2010 and 2011 fiscal years, School faculty authored 14 grant proposals totaling $7,341,080 and were awarded $432,774 in 10 sponsored research grants. Overall sponsored research expenditures have increased significantly, particularly in the past two years:

Year	Sponsored Research Expenditures
2006	$330,735
2007	$185,886
2008	$184,035
2009	$222.622
2010	$533,860
Total	$1,457,138

Data from "Metrics Report for Academic Colleges and Departments," published by the Provost's Office.

Progress toward the new initiatives that were put forward as part of the School proposal is as follows:

> Establish the *Virginia Center for Design Research:* Since it was initiated in 2003, the Center for Design Research has been responsible for a number of important research and outreach projects, including the 2005 Solar Decathlon House, the Extreme Makeover: Home Edition Blacksburg house, and, more recently, the LumenHAUS.

Create a new Master of Industrial Design degree program: A final proposal for this new degree has not yet been developed, nor processed through university and state governance, but it has been included on the Institutional Plan for Graduate Degrees, renamed "Master of Design."

Develop Interdisciplinary Research/Outreach Studios for upper-year undergraduate students: Many special project studios have been created since 2003, working on a diverse set of design issues, including passenger rail service in Virginia, urban design in Harrisonburg, VA, the KEM studio, a two-week studio experience intended to demonstrate how interdisciplinary collaboration can liberate and invigorate design and design thinking, and a joint Architecture and Landscape Architecture studio during the Fall of 2011.

Establish a *Faculty Research Development Institute:* This initiative has been replaced by other college and university programs

Increase the capacity of the existing Master of Science in Architecture program to support research: The Master of Science program has been strengthened with additional faculty and graduate assistantship support.

Increase opportunities for Doctoral study in Architecture and Design: A new PhD program in Architecture and Design Research was approved by the State Council of Higher Education in 2006, and its first cohort of students was admitted in 2007. The program, based in Blacksburg and Alexandria, currently has 26 students enrolled (Fall 2010).

Establish a Summer Institute for Architecture and Design Education: This initiative has not yet been developed.

Establish a Masters program in Urban Design: Plans are currently underway to initiate an urban design program, as a concentration within the Master of Science in Architecture program, initially in Alexandria, and ultimately also on the Blacksburg campus.

Create an undergraduate Minor in Urban Design: This initiative has not yet been developed, but it may be realized in conjunction with the Urban Design Masters degree program.

2014 Program Update:

The faculty in the architecture programs are engaged in continuous self-assessment of student performance and educational outcomes through end-of-semester discussions among program faculty, both formal and informal. In addition, external assessment instruments continue to be used to evaluate our educational efforts. Students evaluate their instructors for every course each semester through the Student Perceptions of Teaching (SPOT) survey, now conducted entirely on-line. The Virginia Tech Office of Academic Assessment continues to conduct the "Senior Survey," a comprehensive annual survey of all graduating undergraduate students. In August of each year, the School of Architecture + Design conducts a career placement survey of May graduates to determine employment rates.

Progress toward Goal #1 (national and international reputation): Since the last accreditation visit, the rankings of the Virginia Tech architecture programs by *DesignIntelligence* have remained high. In the recent 2015 rankings, the undergraduate architecture program is ranked 4th, having been included in the top-five-ranked B.Arch. programs for eight of the last nine years. The graduate architecture program is currently ranked 14th among NAAB-accredited M.Arch./D.Arch. programs. Virginia Tech architecture faculty are consistently represented among *DesignIntelligence's* list of "most admired" design educators.

Progress toward Goal #2 (premier international center for design research through innovative research and outreach projects): In 2012, the LumenHAUS project was selected as one of

nine recipients of the AIA Institute Honor Awards for Architecture. This is the first time a university team has been given this national honor. Also, since the last accreditation visit, Virginia Tech's design/buildLAB has received a number of honors, including the 2012 "Building of the Year" for the Masonic Amphitheatre in Clifton Forge, Virginia, as selected by American-Architects.com; inclusion in Public Interest Design 100, a list of people and teams working at the intersection of design and service in the U.S.; the Popular Choice in the Architecture +Urban Transformation category in the 2014 Architizer A+ Awards for Smith Creek Park (the Masonic Amphitheatre and Smith Creek Pedestrian Bridge Projects jointly); the A+ Award in the fourth annual AZ Awards program, an international competition honoring excellence in design and architecture, sponsored by AZURE, Canada's leading contemporary architecture and design magazine; and an Architecture Honor Award presented by the Virginia Society of the American Institute of Architects (AIA).

Progress toward Goal #3 (increase sponsored research activity): Although the amount of sponsored research funding awarded to architecture and design faculty fell slightly over the past two years, due in part to the effects of the economic downturn, research activity has remained high. Prof. Mehdi Setareh has received a number of large sponsored research grants to study building vibrations. The Center for Design Research has continued to pursue a leadership role in research in digital fabrication, securing significant funding for state-of-the-art robotics equipment. In addition, the Urban Design concentration within the Master of Science in Architecture degree program was approved by University governance and has now been initiated, with its first cohort of students admitted for Fall of 2014.

5. Summary of Activities in Response to Changes in the NAAB Conditions

2014 Program Response:
While not yet in effect until April of 2015, the program faculty have met and are aware of the pending changes in the 2014 NAAB *Conditions for Accreditation*.

Some revisions in various course syllabi are underway to address the minor changes in what will be in Realm A: Critical Thinking and Representation. However, our current focus is on Realm B: Building Practices Technical Skills, and Knowledge and Realm C: Integrated Architectural Solutions.

Within Realm B we are directing our attention toward raising the students' awareness of how quality in urban environments is constituted (B2, B1). At the same time, through exercises in theory and practice we seek to broaden an awareness of what constitutes the range environmental responsibility and in which way an architect can significantly contribute toward a positive development in this field. Regional recognition of resources in environmental responsibilities (B6) will be addressed in both studio and course work. Our curriculum places the emphasis of Realm B mostly in our 3rd year, where the integration of various systems form a platform for architectural design. In our second year, specific exercises in Building Structures have been addressing seismic considerations (B5) in building design, and these will be made even more explicit.

Likewise, Realm D, which focuses on various aspects of professional practice, contains minor changes in content and is updated with a terminology that fosters a more coherent understanding of concerns in the contemporary profession and its practice.

Our greatest focus is on Realm C: Integrated Architectural Solutions which now replaces the former B6 Comprehensive Design criterion. We believe that the changes in Comprehensive Design are consistent with our overall approach, with more emphasis on building envelope systems and building assemblies. Additionally, the term "environmental stewardship" suggests a broader and more reasoned approach to architectural design than what often is commercially branded as sustainability. Both Research (C1) and Integrated Evaluations and

Decision Making Design Process (C2) have been an integral part of our 3rd year coordinated course sequence consisting of ARCH 3015, 3016, Architecture III studio, ARCH 3054, Building Analysis and ARCH 3045, 3046, Building Assemblies.

Overall, considering our program's specific mission and structure, we perceive the changes in the *Conditions* as mostly positive and believe that our adjustments will be largely implemented by the beginning of the Fall Semester in 2015.

Supplemental Material

The following items are available at XXXXXXXXXXXXXXXXXXXXXXXXXX

a. New/revised course syllabi

b. Student work demonstrating progress in addressing SPC not met

c. One-page resumes for new administrators

d. One-page resumes for new faculty