North Carolina State University Interim Progress Report for Year Three

Instructions and Template

November 30, 2021

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1. INSTRUCTIONS AND TEMPLATE GUIDELINES

Purpose

Continuing accreditation is subject to the submission of interim progress reports at defined intervals after an eight-year or four-year term of continuing accreditation is approved.

This narrative report, supported by documentation, covers three areas:

- 1. The program's correction of not-met Conditions or Student Performance Criteria from the most recent Visiting Team Report.
- 2. Significant changes to the program or the institution since the last visit.
- 3. Summary of Preparations for Adapting to 2020 NAAB Conditions.

Supporting Documentation

- 1. The narrative should describe in detail all changes in the program made in response to not-met Conditions and Student Performance Criteria.
- 2. Provide information regarding changes in leadership or faculty membership. Identify the anticipated contribution to the program for new hires and include either a narrative biography or one-page CV.
- 3. Provide detailed descriptions of changes to the curriculum that have been made in response to notmet Student Performance Criteria. Identify any specific outcomes expected to student performance. Attach new or revised syllabi of required courses that address unmet SPC.
- 4. Provide additional information that may be of interest to the NAAB team at the next accreditation visit.

Outcomes

IPRs are reviewed by a panel of three: one current NAAB director, one former NAAB director, and one experienced team chair. The panel may make one of three recommendations to the Board regarding the interim report:

- Accept the 3-Year Interim Progress Report as having demonstrated satisfactory progress toward addressing deficiencies identified in the most recent VTR. If the Board approves the recommendation no further reporting is necessary. The Annual Statistical Report (See Section 9 of the 2015 Procedures) is still required.
- 2. Accept the 3-Year Interim Progress Report as having demonstrated progress toward addressing deficiencies identified in the most recent VTR; the fifth-year report must include additional materials or address additional sections. The Annual Statistical Report is still required.
- 3. Reject the 3-Year Interim Progress Report as having not demonstrated sufficient progress toward addressing deficiencies and advance the next accreditation sequence by at least one calendar year but not more than three years, thereby shortening the term of accreditation. In such cases, the chief academic officer of the institution will be notified, and a copy sent to the program administrator. A schedule will be determined so that the program has at least six months to prepare an Architecture Program Report. The Annual Statistical Report is still required.

Deadline and Contacts

IPRs are due on November 30. They shall be submitted through the NAAB's Annual Report System (ARS). As described in Section 10 of the 2015 NAAB Procedures for Accreditation "...the program will be assessed a fine of \$100.00 per calendar day until the IPR is submitted." If the IPR is not received by January 15 the program will automatically receive Outcome 3 described above. Email questions to accreditation@naab.org.

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¹ The team chair will not have participated in the visiting team during the year in which the original decision on a term of accreditation was made.

- 1. Reports shall be succinct and are limited to 40 pages/20 MBs, including supporting documentation.
- 2. Type all responses in the designated text areas.
- 3. Reports must be submitted as a single PDF following the template format. Pages should be numbered.
- Supporting documentation should be included in the body of the report.
 Student work is not to be submitted as documentation for a 3-Year IPR.

2. EXECUTIVE SUMMARY OF 2018 NAAB VISIT

CONDITIONS NOT MET

2018 VTR	
II.4.2 Access to NAAB Conditions and	
Procedures	
II.4.4 Public Access to APRs and VTRs	

STUDENT PERFORMANCE CRITERIA NOT MET

2018 VTR
B.4 Technical Documentation
B.6 Environmental Systems
B.10 Financial Considerations
C.2 Integrated Evaluations and Decision-
Making Design Process
C.3 Integrative Design

3. TEMPLATE

Interim Progress Report

North Carolina State University

College of Design
School of Architecture

B. Arch. [preprofessional degree + 30 semester credits]
M. Arch. Track 1 [preprofessional degree + 48 semester credits]
M. Arch. Track 3 [non-preprofessional degree + 96 semester credits]

Year of the previous visit: 2018

Please update contact information as necessary since the last APR was submitted.

Chief administrator for the academic unit in which the program is located:

Name: David Hill, FAIA

Title: Head of the School of Architecture **Email Address:** dbhill@ncsu.edu

Physical Address: Campus Box 7701, College of Design, 50 Pullen Road, Raleigh, NC 27695

Any questions pertaining to this submission will be directed to the chief administrator for the academic unit in which the program is located.

Chief academic officer for the Institution:

Name: Dr. Warwick Arden

Title: Executive Vice Chancellor and Provost

Email Address: provost@ncsu.edu

Physical Address: Campus Box 7101, NC State University, 20 Watauga Club Dr., Raleigh, NC 27695

Text from the most recent VTR is in the gray text boxes. Type your response in the designated text boxes.

Progress in Addressing Not-Met Conditions and Student Performance Criteria

a. Progress in Addressing Not-Met Conditions

II.4.2 Access to NAAB Conditions and Procedures

2018 Visiting Team Assessment: The link for the 2014 NAAB Conditions for Accreditation (https://design.ncsu.edu/wordpress/wp-content/uploads/2017/09/2014-Conditions-Final-Approved-Companion-v2.docx) is not correct; it downloads the *Guide to the 2014 Conditions for Accreditation and Preparation of an Architecture Program Report 2ND EDITION* instead of the 2014 NAAB Conditions for Accreditation; link to the 2015 Conditions for Accreditation https://design.ncsu.edu/about/accreditation/ is correct.

North Carolina State University, 2021 Response: This link has been updated for the 2014 NAAB Conditions for Accreditation. See: https://design.ncsu.edu/wp-content/uploads/2020/04/01_Final-Approved-2014-NAAB-Conditions-for-Accreditation.pdf We have added links to the 2020 NAAB Conditions for Accreditation and Procedures for Accreditation. See links here: https://www.naab.org/wp-content/uploads/2020-NAAB-Conditions-for-Accreditation.pdf and https://www.naab.org/wp-content/uploads/2020-NAAB-Procedures-for-Accreditation.pdf Our general web link to accreditation information is https://design.ncsu.edu/about/accreditation/

II.4.4 Public Access to APRs and VTRs

2018 Visiting Team Assessment: The NAAB decision letter was not found: https://design.ncsu.edu/about/accreditation/

North Carolina State University, 2021 Response: This link has been corrected to show the current decision letter. See: https://design.ncsu.edu/wp-content/uploads/2020/04/NAAB-Decision-Letter-2019_NCStateDesign-School-of-Arhchitecture.pdf The previous decision letter is also available at this link: https://design.ncsu.edu/wp-content/uploads/2021/11/North-Carolina-State-University-VTR-Public-2-1.pdf

b. Progress in Addressing Not-Met Student Performance Criteria

B.4 Technical Documentation

2018 Visiting Team Assessment: B. Arch: Evidence was found in areas of technically clear drawings and models, identifying the assembly of materials, systems, and components appropriate for a building design in ARC 501, Professional Architecture Studio I, however no evidence was found demonstrating the ability to prepare outline specifications.

M.Arch: Evidence was found in making technically clear drawings and models identifying the assembly of materials, systems, and components appropriate for a building design in student work prepared ARC 500, Architectural Design: Professional Studio; however no evidence was found demonstrating the ability to prepare outline specifications.

North Carolina State University, 2021 Response: The course assignments for ARC 500 Architectural Design: Professional Studio (M.Arch.) and ARC 501 Professional Architecture Studio 1 (B.Arch.) have been updated. The assignment requires students to write an outline specification for a component of their design projects in these studios. The instructors and external reviewers evaluate the students' proficiency in writing outline specifications, and they provide feedback to ensure success. See Appendix item A for updated syllabus and item B for outline specifications assignment listed in the ARC 500/501 Integrative Studio Phases, Lectures, Deliverables, and SPCs outline.

B.6 Environmental Systems

2018 Visiting Team Assessment: B. Arch: Evidence of student achievement at the prescribed level was not found in student work presented. Scant evidence of student ability was found regarding principles of environmental design.

M.Arch: Evidence of student achievement at the prescribed level was not found in student work presented.

North Carolina State University, 2021 Response: The School of Architecture created a task force to address this issue and make recommendations on improving students' ability to meet this SPC and other SPCs associated with Integrative Design. The task force and instructors updated the ARC 500/501 syllabus (see Appendix item A) and created a new ARC 500/501 Integrative Studio Phases, Lectures, Deliverables, and SPCs outline (see Appendix item B). The outline maps assignments to individual SPCs, including B.6 Environmental Systems. ARC 500 and ARC 501 studios are coordinated in terms of learning objectives, SPCs, schedules, lectures, workshops, and deliverables. Course assignments for ARC 500 Architectural Design: Professional Studio (M.Arch.) and ARC 501 Professional Architecture Studio 1 (B.Arch.) have been updated to ensure that students are capable of designing environmental systems as part of an integrated design project. Faculty and external reviewers provide students with a technical review near the middle of the semester. Students refine their environmental and technical systems for the final review at the semester's end. The assignment requires students to consider various environmental systems—passive and active—to determine the most appropriate systems for their buildings. Students are required to produce natural and mechanical systems diagrams and a 3D digital integration "chunk" model that demonstrates how the components of the environmental systems are integrated with other building systems, such as structure, floorplates. interior partitions, ceilings, and envelopes. The faculty task force, along with a new studio coordinator, Professor Jianxin Hu, and the ARC 500 (M.Arch.) and ARC 501 (B.Arch.) studio instructors created a new lecture and workshop (Instructor Lecture 3: Environmental Systems) to guide students in designing and integrating environmental systems in their design schemes.

B.10 Financial Considerations

2018 Visiting Team Assessment: B. Arch: Evidence of *exposure* to concepts of construction cost estimating and life-cycle costing was found; however no corollary evidence was found demonstrating students' *understanding* of project financing methods and feasibility or operational costs.

M.Arch: Evidence of *exposure* to concepts of construction cost estimating and life-cycle costing was found; however no evidence was found to demonstrate an *understanding* of the concepts presented, such as project financing methods and feasibility or operational costs.

North Carolina State University, 2021 Response: The course syllabi and assignments for ARC 500 Architectural Design: Professional Studio (M.Arch.), ARC 501 Professional Architecture Studio 1 (B.Arch.), and ARC 561 The Practice of Architecture (B.Arch. and M.Arch.) have been updated to effectively address this SPC. In a new ARC 500 and ARC 501 assignment, students are required to prepare a preliminary cost estimate for their design projects, including a summary of hard costs, soft costs, and life-cycle/operational costs (see Appendix item B for ARC 500/501 Integrative Studio Phases, Lectures, Deliverables, and SPCs outline). In ARC 561, course topics, lectures, and workshops have been revised to more thoroughly address financing, feasibility, and life-cycle, operations, and maintenance costs. A new assignment in ARC 561 requires students to determine the financial feasibility of a hypothetical project, with considerations for project financing, budgeting, fees, construction schedule, and project delivery method (see Appendix items C and D for ARC 561 syllabus and new assignment).

C.2 Integrated Evaluations and Decision-Making Design Process

2018 Visiting Team Assessment: B. Arch: Evidence was not found in the work presented. While ARC 501, ARC 502, ARC 561 and ARC 581 have produced case studies, class books, and projects addressing problem identification and set some design parameters, individual student projects generally fail to include evaluative criteria, present a systematic analysis of design solutions, or predict effectiveness of implementation(s).

In addition, plumbing, mechanical, electrical, and fire protection systems are not readily identified in many projects. Building systems identified do not logically integrate with other building service systems and the overall building design. Designs did not demonstrate an ability to integrate life safety requirements.

M. Arch: Evidence was not found in work presented. While ARC 500 and ARC 561 have produced case studies, class books, and projects addressing problem identification and set some design parameters, individual projects fail to include evaluative criteria, present a systematic analysis of design solutions, or predict the effectiveness of implementation(s).

In addition, plumbing, mechanical, electrical, and fire protection systems are not readily identified in many projects. Building systems identified do not logically integrate with other building service systems and the overall building design. Designs did not demonstrate an ability to integrate life safety requirements.

North Carolina State University, 2021 Response: The School of Architecture created a task force to address this issue and make recommendations on improving students' ability to meet this SPC and other SPCs associated with Integrative Design. The task force and instructors updated the ARC 500/501 syllabi and created a new ARC 500/501 Integrative Studio Phases, Lectures, Deliverables, and SPCs outline (see Appendix items A and B). The outline maps assignments to individual SPCs, including C.2 Integrated Evaluations and Decision-Making Design Process, ARC 500 and ARC 501 studios are coordinated in terms of learning objectives, SPCs, schedules, lectures, workshops, and deliverables. Course assignments/deliverables for ARC 500 Architectural Design: Professional Studio (M.Arch.) and ARC 501 Professional Architecture Studio 1 (B.Arch.) have been updated to ensure that students are capable of defining assessment criteria. Students use their identified criteria to assess alternatives, make design decisions, and develop their schemes. This is done as part of an integrative design project, beginning at an early stage of the project. The task force, along with a new studio coordinator and the ARC 500 (M.Arch.) and ARC 501 (B.Arch.) studio instructors, created two new lectures and workshops (Instructor Lecture 1: Pre-Design Methods and Instructor Lecture 2: Sustainable Strategies) to guide students in creating, documenting, and applying assessment criteria in their design schemes. Pre-Design Methods includes topics, such as site analysis, program requirements, code research, building and site precedents, and scheme assessment criteria. Sustainable Strategies includes an overview of climate change, green building frameworks, the impact of buildings on water and energy consumption, waste, and carbon emissions, basic and advanced strategies for sustainable design, building ratings systems, synergistic design strategies, and evaluative procedures. Updated assignments require students to create alternative schemes and produce illustrated comparative analyses that lead to informed and sound design decisions. Faculty and external reviewers provide students with a review of their scheme comparisons before students proceed with project development. Students refine their schemes based on the identified evaluative criteria. Subsequent assignments have been updated, requiring students to clearly and effectively integrate and illustrate building systems. This includes plumbing, mechanical, electrical, and fire protection. Assignments require students to produce technical wall sections, details, reflected ceiling plans, systems diagrams, and a systems-integration 3D digital building "chunk" model that shows components. See response to C.3 below for additional steps taken to address issues with integrative design.

2018 Visiting Team Assessment: B. Arch: Evidence was not found in student work presented. The projects presented in ARC 501 and 502 illustrated integration of environmental stewardship, site conditions, and building envelope systems and assemblies, but failed to appropriately address all other criteria covered by this SPC.

M. Arch: Evidence of student achievement at the prescribed level was not found in student work presented. The projects presented in ARC 501 and 502 illustrated integration of environmental stewardship, site conditions, and building envelope systems and assemblies, but failed to appropriately address other other criteria covered by this SPC.

North Carolina State University, 2021 Response: The School of Architecture's Integrative Studio Task Force addressed this SPC and the constituent SPCs that are required for successful completion of SPC C.3 Integrative Design. As a result, instructors have updated ARC 500/501 syllabi and created a new ARC 500/501 Integrative Studio Phases, Lectures, Deliverables, and SPCs outline (see Appendix items A and B). The outline maps assignments to individual SPCs within the realm of C.3 Integrative Design: B.2 Site Design, B.3 Codes and Regulations, B.4 Technical Documentation, B.5 Structural Systems, B.6 Environmental Systems, B.7 Building Envelope Systems and Assemblies. ARC 500 and ARC 501 studios are coordinated in terms of learning objectives, SPCs, schedules, lectures, workshops, and deliverables. Course lectures, workshops, and assignments for ARC 500 Architectural Design: Professional Studio (M.Arch.) and ARC 501 Professional Architecture Studio 1 (B.Arch.) have been updated to ensure that students are capable of designing an integrated design project that addresses each of the SPC components of C.3. Refer to the Integrative Studio Phases, Lectures, Deliverables, and SPCs outline provided in the Appendix for details on lecture/workshop content and descriptions of assignments. Updated assignments require students to clearly and effectively integrate and illustrate environmental stewardship strategies, technical drawings and specifications, accessibility requirements, site conditions, life safety, environmental systems, PME, fire protection, and building envelope systems. Students are required to produce a pre-design research booklet, technical wall sections, construction details, site and floorplans, building/site sections, reflected ceiling plans, mechanical and structural systems diagrams, code compliance diagrams, physical study models, a systems-integration ("chunk") 3D digital model, and preliminary cost estimates with summarized life-cycle/operational costs. A series of instructorand guest-led lectures and workshops that prepare students for the assignments is a significant update to the Integrative Design studio. Topics include: Pre-design Methods, Sustainable Strategies, Environmental Systems, Codes, Building Envelopes, Systems Integration, Electrical, Lighting, Fire Protection, and Cost Estimating, and Outline Specifications, Students are provided with several intermediate reviews during the semester to receive feedback that will lead to more complete, refined, and integrated design schemes. Student work from these studios is assessed on an annual basis as part of NC State University's Assessment of Academic Programs.

II. Changes or Planned Changes in the Program

Please report such changes as the following: faculty retirement/succession planning; administration changes (dean, department chair, provost); changes in enrollment (increases, decreases, new external pressures); new opportunities for collaboration; changes in financial resources (increases, decreases, external pressures); significant changes in educational approach or philosophy; changes in physical resources (e.g., deferred maintenance, new building).

North Carolina State University, 2021 Response: Faculty updates: (see Appendix item E) Since the last NAAB visit, the School of Architecture has added three new tenure-track/tenured professors: George Elvin, PhD (Associate Professor with tenure), Shawn Protz (tenure-track Assistant Professor), and Traci Rider, PhD (tenure-track Assistant Professor). Professor Patrick Rand, FAIA, retired at the end of the Spring 2021 semester. The school is currently conducting a search for a new tenure-track professor. Administration updates: Associate Professor Sara Queen was named Director of Undergraduate Programs in Architecture in 2020. There have been no changes in dean, school head, provost, or chancellor since the last NAAB visit. Changes in

enrollment: There have been no significant changes in enrollment over the past three years. We have seen slight increases in undergraduate enrollment. Graduate enrollment saw a slight decrease during Covid due to new international students deferring enrollment for a semester or year due to travel restrictions and visa issues. Graduate enrollment has returned to normal. Covid has been the chief external pressure relative to recruiting and admissions during this period. In spite of this, we have found online open houses to be effective events for engaging out-of-state and international prospective students. New opportunities for collaboration: The School of Architecture is currently working with NC Central University, an HBCU, to establish a prearchitecture program at Central. This program will create collaborative opportunities between our two schools and potentially provide a pipeline for Central students to our M.Arch. program. The school teaches graduate-level collaborative research and design studios with the Department of Landscape Architecture and Environmental Planning, Recent and upcoming Architecture studios include partnerships with industry (National Concrete Masonry Association, Precast Concrete Institute), professional practices (SOM, Fentress Architects, Hanbury), and community organizations and research agencies (NC SeaGrant, NC Coalition to End Homelessness, Town of Nags Head, NC, Lenoir County, NC), The school maintains close ties to AIA Triangle and AIA North Carolina through events, scholarships, and mentoring programs. Financial Resources: There have been no new permanent changes in financial resources. During the last academic year, the school was instructed to withhold a percentage of our operating funds, in case the state asked for a reversion of funds. Ultimately, the state did not require a reversion. Educational Approach and Philosophy: There have been no significant changes to our mission or educational approach. We are evaluating our mission, curriculum, and approach as we adapt to new 2020 NAAB Conditions. A curriculum task force has recently recommended changes that the school is pursuing. Physical Resources: There have just a few changes to physical resources. The School of Architecture has moved into studio spaces in Brooks Hall that were recently vacated when the Department of Graphic and Industrial Design acquired new spaces in Lampe Hall. New Assistant Professor, Shawn Protz, has established space within the college's Materials Lab for a new Ceramics Lab.

III. Summary of Preparations for Adapting to 2020 NAAB Conditions

Please provide a brief description of actions taken or plans for adapting your curriculum/ classes to engage the 2020 Conditions.

North Carolina State University, 2021 Response: The School of Architecture is taking many steps to adapt to the new 2020 NAAB Conditions. In order to gain a greater understanding of the new conditions and procedures, the school head and faculty have attended numerous workshops and webinars hosted by the Association of Collegiate Schools of Architecture and the NAAB staff. These include "Principles of Assessment in Design Education." "NAAB Accreditation: 2020 Conditions and Procedures" at the 2021 ACSA Administrators Conference, "Implementing 2020 NAAB Conditions & Procedures" at the ACSA 109th Annual Meeting. The School of Architecture participated in a one-on-one Assessment Coaching Session with Herb Childress through a program offered by ACSA. We have taken the following steps to improve our assessment framework for better alignment with the new NAAB conditions: established a curriculum task force that has made recommendations for curricular updates; mapped new NAAB Program Criteria and Student Criteria to our curriculum and programs to ensure alignment and to reveal any necessary changes; created a new Justice, Equity, Diversity, and Inclusion (JEDI) plan that provides an assessment tool; revised the School of Architecture Procedures Manual; and created a preliminary assessment plan that includes assessment area, evidence to collect, frequency, and actions/updates. NC State University requires the School of Architecture to complete a Program Outcomes Assessment for our B.Arch. and M.Arch. programs and our three graduate certificates (Energy and Technology in Architecture, City Design, and Public Interest Design). We have updated some components of these assessments to better align with the new conditions. We have mapped the new Program Criteria (PC) to our mission statement and determined the most critical components of our program that address the PCs. Future faculty retreats and bi-weekly meetings are planned to continue our transition to the new conditions.

IV. Appendix (include revised curricula, syllabi, and one-page CVs or bios of new administrators and faculty members; syllabi should reference which NAAB SPC a course addresses)

North Carolina State University, 2021 Update: Appendix items include: A.) Updated ARC 500/ARC 501 Syllabus, B.) New ARC 500/501 Integrative Studio Phases, Lectures, Deliverables, and SPCs outline, C.) Updated ARC 561 Syllabus, D.) ARC 561 assignment, E.) New faculty and administrator bios