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NAAB Board of Directors
October 2024 Board Meeting

National Architectural Accrediting Board
107 S. West St, Suite 707
Alexandria, VA
22314

Subject: Optional Response to VTR, The University of Memphis, Department of Architecture, Continuing Accreditation, Master of Architecture Program

NAAB Board of Directors,

On behalf of the students and faculty in the Department of Architecture at the University of Memphis, thank you for the opportunity to provide additional information relative to the VTR conditions not met for SC.5 and SC.6. The Department would like to thank the NAAB Board for taking the time to review the dossier for our program. We would also like to thank the visiting team for their efforts and participation in the review process, for their efficient and cordial execution of the March 2024 site visit, and for the preparation of the VTR. We acknowledge the amount of work, focus, and patience the process requires and are grateful for the volunteerism and commitment of the team members. We would further like to thank the NAAB support team that facilitated the process of the dossier submissions and the site visit.

As was noted in the APR (p.9), the Department chose to submit student work from the 2022-2023 academic year. This allowed faculty to note changes that had occurred in Fall 2023, and anticipated changes for Spring 2024, in course information provided to the Visiting Team via documentation in the Digital Team Room. Having read through the VTR and re-read through the documentation submitted (including the APR, the course information files for the courses submitted to meet SC.5 and SC.6, and the student work submitted as example), we offer the following points of consideration to the Board.

We interpret the VTR comments under the unmet criteria for SC.5 to mean the following:

> We provided a definition for design synthesis and described how it was assessed, including what improvements we had made and planned to make. However, we did not explicitly describe in our benchmarks and assessment strategies what competency meant for the elements within this criterion. This lack of specificity inhibited the reading of demonstration and documentation noted in the VTR. To amend this, we have noted our program's definition of the elements in this criterion, our definition of minimum requirements to be met, and desired outcomes. We also note where in the student documentation we expect them to demonstrate the specific element. We have attached this document to illuminate the discrepancy between our evaluation of the work and what the team evaluated. We provide this information to demonstrate our compliance with the evidence provided before and during the site visit as meeting the requirements for this criterion as we have understood and defined it within our program.
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> As per our assessment strategy, we noted our areas for improvement in the APR and in the assessment forms in the Digital Team Room. We acted on those areas for improvement as indicated in our documentation. This is of specific note for one of the students included in the review, whose deficiencies were most clearly articulated in the VTR. As was noted in the APR, the student's subsequent studios remedied these concerns. This is consistent with our program's individualized approach; however, this work (while already complete at the time of the visit) was not presented to the team. (See lessons learned below.)

We interpret the VTR comments under the unmet criteria for SC.6 to mean the following:

> We provided a definition for building integration and described how it was assessed, including what improvements we had made and planned to make. However, we did not explicitly describe in our benchmarks and assessment strategies what competency meant for the elements within this criterion. This lack of specificity inhibited the reading of demonstration noted in the VTR. To amend this, we have noted our program's definition of the elements in this criterion, our definition of minimum requirements to be met, and desired outcomes. We also note where in the student documentation we expect them to demonstrate the specific element. Our emphasis, as stated in our position, is on "a design where the technical aspects of the project support the design ideas in realistic ways," i.e., towards a workable building. This definition moves from our faculty's collective work for defining the criterion as based on the assessment process described in *Program Assessment in Design Education* by Herb Childress.
>
> We have attached a clarifying document to illuminate the discrepancy between our evaluation of the work and what the team evaluated. We provide this information to demonstrate our compliance with the evidence provided before and during the site visit as meeting the requirements for this criterion as we have understood and defined it within our program.

As accreditation is meant to assist in the continual improvement of the programs under review, we acknowledge the following lesson learned from the process. We offer this in consistency with our assessment process, as part of the observation and reflection portions of the action research cycle.

> For SC.5 and SC.6, we chose to submit one course to meet each criterion individually because we believed that would provide a more straight-forward review process; however, in the APR, under PC.2 Design, we described our process of thinking holistically across our curriculum, and under PC.7 Learning and Teaching Culture, we noted how we work across individual student's program paths to facilitate their growth and development in areas of concern or weakness. Because all three studios that precede the culminating studio for the degree program—as well as the culminating studio itself—demonstrate this departmental value, we should have included all graduate studios (ARCH 7711, 7712, 7713, and 7994) under these two criteria. We would have been better served in the review of these criteria if we evidenced, through student work, the repeated practice of synthesis and integration that takes place across the four studios, as well as the projects in ARCH 7421, Advanced Environmental Systems. This is what we believe the team was suggesting when they added some of these courses to the PC/SC matrix.

Thank you again for your time and consideration. We look forward to receiving the Board's decision following the October meeting.

Respectfully submitted by,

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Addenda

> Clarification of Program's Definition for SC.5, UofM, Dept of Architecture
> Clarification of Program's Definition for SC.6, UofM, Dept of Architecture

Clarification of Program's Definition for SC.5, UofM, Dept of Architecture

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

How the program ensures that students develop the ability to make design decisions within architectural projects

What this means: Students develop their project scope and direction through research and interview with clients and/or users. Each student has the opportunity to shape the outcome of the project through their architectural vision as long as it meets the needs expressed in the original research. Students examine client/user needs, regulatory requirements for the project type, site conditions, what accessibility means in their project's context, and possible sustainable strategies. This is done to define a project and provide a direction for the decision making needed to complete a workable and architectural design.

Minimum requirements: Student projects should demonstrate understanding of, and basic competence in, these concepts and the intention to use each to inform the others.

Desired outcomes: Projects demonstrate a critical approach to how each concept is related within the project and ultimately affects the ability for the project to meet client expectations and accommodate human thriving.

Students develop the ability to make design decisions within architectural projects while demonstrating an understanding of user requirements

What it means: Students should develop the ability to critically approach a project in terms of what cultural, emotional, cognitive, and physical needs of the users and clients are. A student should learn to distinguish between the needs of different stakeholders in a project to integrate them into the design outcome. User, client, and building type requirements need to be critically balanced and informed by research. This is demonstrated in the Research and Programming process included at the beginning of the project. This roughly approximates part of the "pre-design" phase of architectural services.

Minimum requirements: Student projects demonstrate the ability to develop a set of user requirements from primary and secondary sources. Projects show an understanding of how user requirements affect, organize, layout, and size spaces, and how material/product selection is based in research and good design practice. Projects show a clear design concept that reflects or incorporates user needs and integrates architectural decisions.

Desired outcomes: Projects show a deep understanding of user and client expectations and requirements. These should be based on a critical understanding and integration of data from multiple primary and secondary sources. This deep understanding forms the basis for creative thinking.

Students develop the ability to make design decisions within architectural projects while demonstrating an understanding of regulatory requirements

What it means: The basic regulatory requirements of a project are the building code. Many building types, site conditions, system selections, and user groups require additional understanding of referenced standards. Students should know the general aspects of the building code and how to access and integrate other codes that apply. Evidence is gathered in the Code Review assignment and final Life Safety Board.

Minimum requirements: Student projects show successful incorporation of code required egress. Student projects show understanding of how occupancy type, construction type, and active and passive fire protection affect a project. Student projects identify and incorporate specific building type regulations (school, hospital, etc.).

Desired outcomes: The student would critically engage in how code and other regulations affect the ultimate design outcome, and how the requirements can be met in a way that enhances other aspects of the design.

Students develop the ability to make design decisions within architectural projects while demonstrating an understanding of site conditions

What it means: Students should understand how site issues present challenges and opportunities for a project. These issues include topics such as topography, soil conditions, solar orientation, climate, local wind patterns, urban context, view, and historical context, among others. This is dependent on both the site and the requirements of the project. Therefore, sites should be observed, documented, analyzed, and responded to considering the program and goals of the project. Evidence should be found both on the site analysis assignment and on the final site plan.

Minimum requirements: Projects state and meet parking requirements and successfully integrate human movement on the site including accessible parking. Student projects define and respond to site context (slope, drainage, etc.). Student projects show understanding of the site and urban context and respond by integrating the building type and knowledge of the site in design decisions.

Desired outcomes: The student would have a critical understanding of how the site conditions present opportunities and challenges to a building project. The student would show how site conditions affected the program and concept of the project. Since so many sustainable systems rely on building orientation and leveraging aspects of the site, students would integrate their approach to sustainability with their knowledge of the site and the wider climate of the area.

Students develop the ability to make design decisions within architectural projects while demonstrating an understanding of accessible design

What it means: Accessibility is minimally defined by the Americans with Disabilities Act. Efforts beyond this to universal and inclusive design are the true goal. What those efforts are is dependent on the specifics of the project. A student should know what these terms involve and how to integrate them into their particular design. Evidence should be found on the final boards on the floor plans, accessibility plans, and an accessibility statement.

Minimum requirements: Student project successfully defines and meets ADA standards specific to the building type. Student projects define and incorporate user specific accessibility and inclusion strategies into the final design.

Desired outcomes: Student will critically assess what universal and inclusive design means in their project based on their research about users and the stated goals of the project. These will be made a subject of importance in the development of the design and integrated into the project design.

Students develop the ability to make design decisions within architectural projects while demonstrating consideration of the measurable environmental impacts

What it means: Students should understand how sustainable decisions have a net positive or negative effect on the effectiveness of the final design. The effect of these decisions can be calculated and compared to allow for clear decision making. Evidence should be found on the final boards, specifically on the sustainability board.

Minimum requirements: Student projects will define sustainable approaches to the project that are meaningful for the building type. The student project shows the benefit of sustainable strategies quantitatively against a predetermined measure and integrate multiple sustainable strategies/systems based in that data.

Desired outcomes: Student will critically evaluate each system considering the climate, project goals, local expertise, and balance them against the possible up-front and long-term benefits to the project.

Clarification of Program's Definition for SC.6, UofM, Dept of Architecture

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

How the program ensures that students develop the ability to make design decisions within architectural projects

What this means: Students have the opportunity to develop their projects through multiple iterations. Students integrate the technical elements (listed below) into their projects in a way which supports their design intent. The goal is that technical elements are not seen as being in competition with architectural design but ways to reinforce and increase the depth of design ideas.

Minimum requirements: Projects demonstrate an intention to integrate each of the technical elements in support of the overall design idea(s). Projects might not perfectly execute all of the technical details, but the projects demonstrate an understanding and importance of each of the elements.

Desired outcomes: Projects demonstrate well thought out technical elements that reinforce the overall design idea and demonstrate an understanding of best practices for each of the technical elements in support of the design idea(s).

Making design decisions while demonstrating integration of building envelope systems and assemblies

What this means: Students can select and detail building envelope systems and assemblies including elements such as walls, windows, doors, curtain walls, shading devices, insulation, etc. as is appropriate to the project, the site, and the climate. The building envelope systems integrate with each other, with the structural system, include appropriate environmental control systems (such as sunshades), and are informed by measurable outcomes of building performance, and accomplished to support the design idea(s).

Minimum requirements: Students will demonstrate an understanding of how to integrate elements of building envelope systems and assemblies with the structural system, the environmental controls, and are informed by at least one iteration of data from the measurable outcomes of building performance. Projects may not perfectly execute all of the technical details but will demonstrate an understanding of the principles. At a minimum, the student will demonstrate an understanding of integrating elements of building envelope systems through an annotated building section.

Desired outcomes: Students will demonstrate the ability to select, integrate, and detail elements of the building envelope systems and assemblies with the structural system, the environmental controls, and are informed by multiple iterations of data from the measurable outcomes of building performance in support of the design idea(s). The student may use a building section or other appropriate drawings or models to communicate the technical details and integration.

Making design decisions while demonstrating integration of structural systems

What this means: Students can select and layout structural systems which support the design idea(s) while resisting gravity and lateral forces from the roof to the footings.

Minimum requirements: Students will demonstrate the ability to select, layout, and iterate a structural system which uses published span tables to select appropriate sizes. Projects will include appropriate lateral bracing. Projects may not perfectly execute all of the details or be the most efficient structural system but will at a minimum provide approximately enough space and support for the structural elements. The student may use a 3D structural diagram or physical model in conjunction with visible structural elements in plan and section.

Desired outcomes: Students will demonstrate the ability to select, layout, and iterate a structural system which uses published span tables to select appropriate sizes. Projects will include appropriate lateral bracing. Students will detail appropriate structural connections including connections to building envelope systems. The student may use a 3D structural diagram, a physical model or other appropriate visual communication tools in conjunction with visible structural elements in plan and section.

Making design decisions while demonstrating integration of environmental control systems

What this means: Students will integrate appropriate environmental control systems such as active and/or passive heating, cooling, ventilation, and shading devices in support of the design idea and appropriate for the climate and site.

Minimum requirements: Students will select appropriate HVAC and other environmental control systems in support of their design idea(s). Projects may not perfectly execute all of the elements but will demonstrate understanding of how air (or other heating/cooling vehicle) moves between floors and to/from mechanical units. The student may use (a) diagram(s) to communicate the layout. Chases shall be visible in plan and mechanical units shall be located in plan or on the site plan.

Desired outcomes: Students will select appropriate HVAC and other environmental control systems in support of their design idea(s). Projects will demonstrate iterations informed by the measurable outcomes of building performance. Projects will demonstrate understanding of how air (or other heating/cooling vehicle) moves between floors and to/from mechanical units. The student may use (a) diagram(s) to communicate the layout. Chases shall be visible in plan and mechanical units shall be located in plan or on the site plan.

Making design decisions while demonstrating integration of life safety systems

What this means: Students will integrate life safety into the design of their project in support of the design idea(s). Life safety will focus primarily on egress. Students will design to local building codes or when projects are located overseas, the current version of the IBC may be used. Students will complete a basic code review to determine regulations such as maximum area/height/stories based on construction type and number of occupants. Egress elements shall be accessible.

Minimum requirements: Students will demonstrate the ability to design safe buildings without sacrificing their design ideas with respect to door swing direction, maximum egress distance, egress remoteness, number of exits, and accessible means of egress. Projects may not be perfect but will demonstrate understanding of life safety system principles. Students will typically demonstrate understanding through code notes and a life safety plan.

Desired outcomes: Students will demonstrate the ability to design safe buildings without sacrificing their design ideas with respect to door swing direction, maximum egress distance, egress remoteness, number of exits, and accessible means of egress. Students will typically demonstrate understanding through code notes and a life safety plan.

Making design decisions while demonstrating integration of measurable outcomes of building performance

What this means: Students will measure building performance such as daylighting, ventilation, glare/reflectivity, heat loss, and/or heat gain as is appropriate to their design idea(s). Students will use the data from the measurement to iterate the building design. Students will remeasure the building performance after iteration to show improvement in building performance.

Minimum requirements: Students will measure at least one of the building performance metrics and inform improvements to their building envelope or siting. After iterating the design, students will remeasure the building performance to show improvement.

Desired outcomes: Students will measure multiple aspects of building performance at multiple stages of the building design to inform design decisions throughout the process. Each subsequent measurement will show iterative improvement in the building performance.