



2018 Visiting Team Report

Master of Architecture Program (MArch)

School of Architecture and Landscape Architecture
University of British Columbia

The Canadian Architectural Certification Board

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I. Introduction • CACB Accreditation

The CACB is a national independent non-profit corporation. The directors are elected from individuals nominated by the Canadian Architectural Licensing Authorities (CALA), the Canadian Council of University Schools of Architecture (CCUSA), and the Canadian Architecture Students Association (CASA). The CACB is a decision-making and policy-generating body. It is the sole organization recognized by the architectural profession in Canada to assess the educational qualifications of architecture graduates (Certification Program) and to accredit professional degree programs in architecture that are offered by Canadian universities (Accreditation Program).

The CACB head office is in Ottawa, Ontario. It adheres to the principles of fairness, transparency, clarity, and ethical business practices in all of its activities.

By agreement of the Licensing Authorities (the councils of nine provincial institutes and associations), the CACB was established in 1976 to assess and certify the academic qualifications of individuals holding a professional degree or diploma in architecture who intended to apply for registration. In 1991, the CACB mandate to certify degree credentials was reaffirmed, and its membership was revised to reflect its additional responsibility for accrediting professional degree programs in Canadian university Schools of Architecture.

Graduation from a CACB-accredited program is the first of three steps (education, experience, and examination) on the path to licensure.

The CACB only accredits *Programs* that are intended by their institution to be professional degrees in architecture that lead to licensure. Professional accreditation of a *Program* means that it has been evaluated by the CACB and substantially meets the educational standards that comprise, as a whole, an appropriate education for an architect.

The CACB only awards accreditation to professional degree *Programs* in architecture. A CACB-accredited professional *Program* in architecture is defined as the totality of a student's post-secondary education culminating in a designated professional university degree, which may be a bachelor of architecture (BArch) or a master of architecture (M. Arch) degree.

The *Programs* include:

- a minimum of five years of post-secondary study culminating in a master of architecture degree, which follows a *pre-professional* bachelor's degree, except in Quebec, where the minimum is four years of professional studies following two years of CEGEP;
- a minimum of six years of post-secondary study culminating in a master of architecture degree, which follows a bachelor's degree in any discipline and includes a minimum of three years of professional studies in architecture; or
- a minimum of five years of post-secondary study culminating in a bachelor of architecture degree.

In keeping with the principal of outcome-based *Accreditation*, the CACB does not restrict the structure of a professional *Program* and/or the distribution of its coursework.

The accreditation process requires a self-assessment by the institution or *Program*, an evaluation of the self-assessment by the CACB, and a site visit and review conducted by a team representing the CACB.

The process begins at the school with the preparation of the *Architecture Program Report (APR)*. The *APR* identifies and defines the program and its various contexts, responding to the *CACB Conditions and Procedures for Accreditation*. The *APR* is expected to be useful to the planning process of the school, as well as documentation for the purposes of accreditation.

Upon acceptance of the *APR* by the CACB Board, an accreditation visit is scheduled. The CACB's decision on accreditation is based upon the capability of the program to satisfy the Conditions and Procedures for Accreditation, including the ability of its graduating students to meet the requirements for learning as defined in the Student Performance Criteria. During the visit, the team reviews student work and evaluates it against these requirements. The team also assesses the effectiveness and degree of support available to the architectural program through meetings with the institution's administrators at various levels, architecture and other faculty, students, alumni, and local practitioners.

At the conclusion of the visit, the Visiting Team makes observations and expresses compliments and concerns about the program and its components. It also offers suggestions for program enrichment and makes recommendations, which, in the judgment of the team, are necessary for the program's improvement and continuing re-accreditation. Following the visit, the team writes the following VTR, which is forwarded with a confidential recommendation to the CACB. The CACB then makes a final decision regarding the term of accreditation.

Terms of Accreditation

Term for Initial Accreditation

Programs seeking initial *accreditation* must first be granted candidacy status. The maximum period of candidacy status is six years.

Programs that achieve initial *accreditation* at any time during the six-year candidacy will receive an initial three-year term, indicating that all major program components and resources are in place. Some additional program development may be necessary and/or deficiencies may need to be corrected. Additionally, to be eligible for CACB certification, students cannot have graduated from the *Program* more than two years prior to the initial *accreditation*.

Terms for Continuing Accreditation

- a) Six-year term: Indicates that deficiencies, if any, are minor and that a process to correct these deficiencies is clearly defined and in place. The *Program* is accredited for the full six-year period.

- b) Six-year term with a “focused evaluation” at the end of three years: Indicates that significant deficiencies exist in meeting the requirements of the *CACB Conditions and Terms for Accreditation*; consideration of these deficiencies will form the basis of a focused evaluation. The *Program* is required to report on its particular deficiencies during the third year.
- c) Three-year term: Indicates that major deficiencies are affecting the quality of the *Program*, but the intent to correct these deficiencies is clear and attainable. The *Program* is accredited for a full three-year period. If the *Program* receives two consecutive three-year terms of *accreditation*, then the *Program* must achieve a six-year *accreditation* term at the next *accreditation* visit. If the *Program* fails, it will be placed on a two-year probationary term. If the *Program* fails to achieve a six-year term at its subsequent *accreditation* visit, then its *accreditation* shall be revoked.
- d) Two-year probationary term: Indicates that CACB deficiencies are severe enough to seriously question the quality of the *Program* and the intent or capability to correct these deficiencies is not evident. A *Program* on probation must show just cause for the continuation of its *accreditation*, and at its next scheduled review, the *Program* must receive at least a three-year term or *accreditation* will be revoked. If the two-year probationary term is following the sequence described in “c,” the *Program* must receive at least a six-year term or its *accreditation* shall be revoked.
- e) Revocation of accreditation: Indicates that insufficient progress was made during a two-year probationary term to warrant a full three-year or six-year *accreditation* term. Notwithstanding, the foregoing *accreditation* of any *Program* can be revoked at any time if there is evidence of substantial and persistent non-compliance with the requirements of the *CACB Terms and Conditions for Accreditation*.

Term for Reinstated Accreditation

Should the accreditation of a *Program* lapse or be revoked, the procedures for reinstatement shall be the same as those applicable to initial candidacy. The term of reinstated *accreditation* is the same as the term of initial *accreditation*. If the *Program* is successful in achieving *accreditation* at any time during the six-year candidacy, the *Program* will receive a three-year term of *accreditation*.

II. Summary of Team Findings

1. Team's General Comments

The CACB Visiting Team reviewed the *Master of Architecture Program* (MArch) at the University of British Columbia from March 17th to March 21st 2018. The visit was conducted according to the *CACB Conditions and Terms for Accreditation* and the *CACB Procedures for Accreditation*, 2012 editions.

The Visiting Team would like to thank Ron Kellett, Director of the School of Architecture and Landscape Architecture (SALA) and John Bass, Program Chair, for their warm welcome, as well as the Faculty of Applied Science and the University of British Columbia for their kind reception. Meetings with students, faculty, staff and administrators were open and most helpful, as necessary complements to the *Architecture Program Report (APR)*. The entire accreditation process has been managed very nicely by the Program; the Team room was a pleasant place to work in and the material to evaluate and assess was very clearly presented.

Meetings:

All meetings happened according to the schedule except for:

- Monday March 19: Lunch with selected faculty was canceled by the Team Chair, in agreement with the Program Chair.

Requests for additional information:

During the visit, the Team requested additional information or further clarification, all promptly responded to either by Director Ron Kellett or Program Chair John Bass:

- Documentation on the status/plan/funding/timeline concerning the project for a new building for SALA (Condition 7 Physical resources): *SALA facilities update* (Kellett, March 20, 2018).
- Institutional program evaluation procedure and recent self-study: *Self-Assessment Report – 2014 External Review – UBC School of Architecture and Landscape Architecture + Dean's Report to the School of Architecture and Landscape Architecture on the 2014 External Review* (Parlange, December 4, 2014) + *External Review – Report to Senate* (Kellett, 23 February 2018 (revised) to the 21 October 2015 *Report to Senate*).
- Outlines or syllabuses of the four open enrolment courses (through ENDS): ENDS 110 Measured Architectural Drafting; ENDS 220 Architecture in Context: Vancouver and its Region; ENDS 221 Sustainability by Design; ENDS 231 Thinking by Design.
- More Graduate Project 2 Design Thesis: around 20 were added to the Team room.
- Examples of student work for various courses: ARCH 505 Architectural History 1B (exams); ARCH 512 Structures 1 + ARCH 532 Structures II (exams); ARCH 521 Comprehensive Design Studio (Exercises 1 to 6); ARCH 568 Research Methods (Exercise 3 – Case Studies); ARCH 541 Professional Practice (mid-term exam).
- Inventory of spaces available to SALA (and the MArch program) outside the Lasserre Building.
- Examples of interdisciplinary research and related student opportunities.

2. Conditions for Accreditation “met” and “not met”: a summary

	Met	Not Met
1. Program Response to the CACB Perspectives		
<i>A. Architecture Education and the Academic Context</i>	[X]	[]
<i>B. Architecture Education and the Students</i>	[X]	[]
<i>C. Architecture Education and Registration</i>	[X]	[]
<i>D. Architecture Education and the Profession</i>	[X]	[]
<i>E. Architecture Education and Society</i>	[X]	[]
2. Program Self-Assessment	[X]	[]
3. Public Information	[]	[X]
4. Social Equity	[X]	[]
5. Human Resources	[X]	[]
6. Human Resource Development	[X]	[]
7. Physical Resources	[]	[X]
8. Information Resources and Information Technology	[X]	[]
9. Financial Resources	[X]	[]
10. Administrative Structure	[X]	[]
11. Professional Degrees and Curriculum	[X]	[]
12. Student Performance Criteria (SPC)		
<i>A1. Critical Thinking Skills</i>	[X]	[]
<i>A2. Research Skills</i>	[X]	[]
<i>A3. Graphic Skills</i>	[X]	[]
<i>A4. Verbal and Writing Skills</i>	[X]	[]
<i>A5. Collaborative Skills</i>	[X]	[]
<i>A6. Human Behavior</i>	[]	[X]
<i>A7. Cultural Diversity</i>	[]	[X]
<i>A8. History and Theory</i>	[X]	[]
<i>A9. Precedents</i>	[X]	[]
<i>B1. Design Skills</i>	[X]	[]
<i>B2. Program Preparation</i>	[X]	[]
<i>B3. Site Design</i>	[X]	[]
<i>B4. Sustainable Design</i>	[X]	[]
<i>B5. Accessibility</i>	[]	[X]
<i>B6. Life Safety Systems, Building Codes and Standards</i>	[X]	[]
<i>B7. Structural Systems</i>	[X]	[]
<i>B8. Environmental Systems</i>	[X]	[]
<i>B9. Building Envelopes</i>	[X]	[]
<i>B10. Building Service Systems</i>	[X]	[]
<i>B11. Building Materials and Assemblies</i>	[X]	[]
<i>B12. Building Economics and Cost Control</i>	[]	[X]
<i>C1. Detailed Design Development</i>	[X]	[]
<i>C2. Building Systems Integration</i>	[X]	[]
<i>C3. Technical Documentation</i>	[X]	[]
<i>C4. Comprehensive Design</i>	[X]	[]

D1. Leadership and Advocacy	[X]	[]
D2. Ethics and Professional Judgment	[X]	[]
D3. Legal Responsibilities	[X]	[]
D4. Project Delivery	[]	[X]
D5. Practice Organization	[]	[X]
D6. Professional Internship	[X]	[]

3. Program’s Progress since the previous site visit (from 2012 VTR)

The program has made notable progress since the 2012 visit: it has addressed all the “not met” SPCs, and a good number of the causes for concern.

Causes of concern #1 (from 2012 VTR):

Loss of a downtown presence. *The downtown studio was an important facility for the School. Because of the isolation of the UBC campus it is critical that the school maintains its presence in downtown Vancouver. This has allowed for students to be exposed to the social and urban design issues related to the rapidly evolving inner city’s environment and public discourse within the city. This has also facilitated the School’s involvement with both the architectural and wider community. It was also serving as a gallery as there is no space available on campus for this type of activity and was an ideal location for the thesis students to meet with their mentors from private practice, to have studio space, and exhibition space for their final work. The closure of the downtown studio is a significant loss to the School and the community, both professional and public.*

2018 Visiting Team Assessment:

The loss of the downtown studio has been raised in previous accreditation visits as a concern as it exacerbated the crowding in the Lasserre Building, removed a connection to an urban context (invaluable for a discipline directly connected to urban issues), and adversely impacted the program’s outreach (both to the general public and potential visiting faculty). This is no longer an issue of concern as SALA and the University have moved forward with other initiatives. It is however expected that the SALA Outreach Committee will keep its excellent work and endeavours in downtown Vancouver.

Causes of concern #2 (from 2012 VTR):

Lack of clarity around a new facility. *There is a clear need for either a new building or renovated/expanded Lasserre building. In the meantime, optimization of the Lasserre building could be explored.*

2018 Visiting Team Assessment:

This is still a cause of concern: refer to causes of concern #1 and #2 in the present VTR.

Causes of concern #3 (from 2012 VTR):

Lack of contiguous space for Architecture and Landscape Architecture studios. Available studio space is inadequate and is less per student than at the time of the previous VTR as the Downtown studio was closed. General environmental conditions within the Lasserre building are less than optimal.

2018 Visiting Team Assessment:

This is still a cause of concern: refer to causes of concern #1 and #2 in the present VTR.

Causes of concern #4 (from 2012 VTR):

Administrative Staff. The incomplete amalgamation of SALA is affecting staff, particularly in the area of job descriptions and responsibilities. The School is encouraged to complete this process as soon as possible, to ensure that functionality and proper service to students is maintained.

2018 Visiting Team Assessment:

This is no longer a concern. SALA administrative activities are going along smoothly, managed by a dedicated Director and administrative staff.

Causes of concern #5 (from 2012 VTR):

Budget. Due to the current changes to UBC's budget model, the SALA budget allocation from the University is unknown. The School is encouraged to work with the University to clarify its budget allocation as soon as possible.

2018 Visiting Team Assessment:

This is no longer a concern. SALA budget seems congruent with its activities.

Condition "not met" (from 2012 VTR and 2015 FE):

Condition #7. Physical Resources

The program must provide physical resources that are appropriate for a professional degree program in architecture, including design studio space for the exclusive use of each full-time student; lecture and seminar spaces that accommodate both didactic and interactive learning; office space for the exclusive use of each full-time faculty member; and related instructional support space.

From 2012 VTR:

As previously identified in the last Accreditation Visit, the facilities continue to be of concern for a program dedicated to design and matters related to the spatial efficacies. The elimination of the downtown studio lease for financial considerations by the University has exacerbated the crowding of the Lasserre studio spaces and other spaces on the UBC campus. Additionally, the removal of this studio from the urban setting has drawn universal criticism

from students and staff alike, who considered this invaluable for the course of study which concentrates heavily on urban design issues, some of which are located in the immediate area. The ability for this location to facilitate outreach to the architectural community is now compromised, from a perspective of exhibition exposure to the attraction of visiting critics from the community.

The Lasserre Building, while a fine example of a building of the period, is challenging the faculty to deliver instruction optimally. The separation of program delivery to five buildings on campus is obviously straining cohesion, most notably with the landscape architecture program. A closer physical proximity – even if located in a neighbouring arts precinct - would help to strengthen both programs. The condition and distribution of programming amount the various facilities has a potential impact on the ability of the program to attract new staff.

The space utilized by the architecture program within Lasserre is stretched; addressing this critical consideration has been initiated with the commissioning and receipt in June 2011 of the UB Planning and Design feasibility report. Unfortunately, the timing indicated in the feasibility study no longer appears current and a budget or a funding model was not articulated. While the co-location of architecture with music and planning in Lasserre may accomplish overarching institutional objectives, these are clearly at the expense of the effective operation of the architecture program. This has stressed many of the functions, from overcrowding in studios to scheduled classroom usage. Student gathering space is very limited. The workshop, while clearly well organized and managed, suffers to the point where students using the facility frequently determine the methods employed for project implementation by the availability of some of the equipment. Wisely there has been no attempt to integrate any metal fabrication into a workshop setting, as this would further challenge the already limited space, while impacting safety considerations.

In addition to crowding in the Lasserre building, the physical state of the building itself is of concern. Work areas in the building are not always heated, thereby discouraging student use of the studio spaces in evenings and weekends. Also, and of greater concern, the building does not meet the seismic requirements for the area, which is known to be seismically active. This concern was expressed to the Team by both staff within SALA, as well as by a senior administrator within the University. At the very minimum, the Lasserre building should be upgraded seismically.

From 2015 Focused Evaluation (FE):

Despite all efforts deployed by outgoing director Van Duzer and by UBC Authorities towards funding the new facility, which seems almost secured, the project encountered a major setback at the beginning of 2015 with the concern raised about the site selected for construction. At the time the Focused Evaluation Report was prepared (April 30) no timeline had been confirmed for exploring new sites. Therefore, the status of the new building is uncertain at this time.

The program reports that maintenance and minor upgrades of the existing buildings have been done in 2014 in regards to signage, painting, printer upgrading and furniture.

Considering that the Physical Resources are mostly the same as they were when the 2012 visit occurred, this condition is still Not Met.

2018 Visiting Team Assessment:

This condition is still not met. The Program's presence in the Lasserre Building has been cited in previous accreditation visits as "Not Met" (from 2006 to 2012 to now) due to its shared and crowded space allocation, limited capacity for student gathering and teaching delivery, and general physical state. The issues pertaining to limited space are compounded by the inadequate quality of available spaces which include poor HVAC and disconnected facilities.

Student Performance Criteria "not met" (from 2012 VTR):

B5. Accessibility

Ability to design both site and building to accommodate individuals with varying physical and cognitive abilities.

From 2012 VTR:

Design including barrier free washrooms were integrated in the Architectural Technology 1 course (ARCH 511) and was noticeable in some of the vertical studio and thesis work. However, there is still limited evidence that students have the ability to design a site or a building with the inclusion of the full range of accessibility issues, which includes all types of handicaps. The use of stairs and other universal access barriers in projects, without alternate paths was also noticeable.

From 2015 FE:

Reference to the Building Access Handbook is now part of a Building Code module incorporated in ARCH 511 (Architectural Technology 1), but still appears as a very general consideration.

No evidence of a systematic development of accessible design was observed in the design work. There is still limited evidence that students have the ability to design the site of a building with barrier free paths or to address different range of issues encountered with various physical handicaps. The use of stairs and other universal access barriers in projects, without alternate paths, was still noticeable in the work submitted from the Comprehensive Studio, as much in site planning as well as inside the building. Based on these observations, the Team considers that this criterion is still Not Met.

2018 Visiting Team Assessment:

This criterion is still not met: see the Team assessment of this SPC in the present VTR.

B6. Life Safety Systems, Building Codes and Standards

Understanding the principles that inform the design and selection of life-safety systems in buildings and their subsystems; the codes, regulations, and standards applicable to a given site and building design project, including occupancy classifications, allowable building heights and areas, allowable construction types, separation requirements, occupancy requirements, means of egress, fire protection, and structure.

From 2012 VTR:

ARCH 511, 531, 541 and 543 have little information of specific design, selection and application of Life Safety Systems, Building Codes and Standards as part of the design process. The information provided in the course outline covers topics such as general requirements of codes and standards, yet no specific information about building code classifications, occupancy, separation requirements or fire protection can be found. The vertical studio work and E -Studio work do show inconsistent evidence of students' ability or understanding of these systems within the design process.

From 2015 FE:

Accessibility is still an aspect of this topic and very little evidence is shown that it is covered in the module added in ARCH 511 (Architectural Technology 1). Otherwise, the class exercise and design assignment provide evidence that understanding the principles is somehow reached. This criterion is found to be Met, but the evidence is not strong on Fire Protection.

2018 Visiting Team Assessment:

No comment at this time, following the 2015 FE assessment that the criterion was met.

B10. Building Service Systems

Understanding of the basic principles that inform the design of building service systems, including plumbing, electrical, vertical transportation, communication, security, and fire protection systems.

From 2012 VTR:

ARCH 511, 513 and 533 cover partial areas of building service systems in various degrees: a large focus is displayed on building envelope performance, heat loss and gain calculations, vertical transportation, day lighting, energy and sustainability principles. There is little information or evidence of the integration of actual mechanical or electrical systems, communication, security and fire protection systems or principles as to when and why certain systems will be applied. Throughout the student exhibits there is a lack of evidence of integration of such building service systems, especially basic systems such as HVAC, space requirements for systems and fire protection and how this may affect design considerations.

From 2015 FE:

There are two courses and one design studio that demonstrate systems integration sufficient to meet this criterion. The slide presentations and design assignment provide evidence that

the understanding of the principles is reached. Based on these observations, the Team considers that this criterion is now Met.

2018 Visiting Team Assessment:

No comment at this time, following the 2015 FE assessment that the criterion was met.

C1. Detailed Design Development

Ability to assess and detail as an integral part of the design, appropriate combinations of building materials, components, and assemblies.

From 2012 VTR:

There is no singular evidence in support of this criterion. Various technical courses, including ARCH 511, 531, and 532, indicate intent of aspects of Detailed Design Development. However, this is not translated into a building design. Many design studio work shows no significant evidence of progress beyond the conceptual design stage.

From 2015 FE:

This criterion is now Met. There is a good level of evidence to support this criterion, namely, in the assignments added in Architectural Technology 2 (ARCH 531) and in the Comprehensive Design Studio (ARCH 521).

2018 Visiting Team Assessment:

No comment at this time, following the 2015 FE assessment that the criterion was met.

C2. Building Systems Integration

Ability to assess, select, and integrate structural systems, environmental systems, life safety systems, building envelopes, and building service systems into building design.

From 2012 VTR:

These criteria are evidenced under ARCH 513. However, this course and design studios should provide a more rigorous review of how systems, including conventional systems, are integrated into typical architectural design solutions.

From 2015 FE:

This criterion is now Met. There is a good level of evidence to support this criterion, namely, in the assignments added to Architectural Technology 1 (ARCH 511) and in Comprehensive Design Studio (ARCH 521) on structural systems and environment systems and controls.

2018 Visiting Team Assessment:

No comment at this time, following the 2015 FE assessment that the criterion was met.

C3. Technical Documentation

Ability to make technically precise descriptions and documentation of a proposed design for purposes of review and construction.

From 2012 VTR:

The conceptual development of details and accomplishment in graphical documentation were limited in scope. While some elective courses showed a good level of accomplishment or a technical documentation that emerged from a personal design, the courses dedicated to meet this criterion were lacking in consistency sufficient to meet the ability level.

From 2015 FE:

This criterion is Not Met. There is a lack of evidence that would support a demonstration of ability to conduct appropriate site planning. There is no clear reference of structural axis and levels in the comprehensive studio drawings.

2018 Visiting Team Assessment:

This criterion is now met.

C4. Comprehensive Design

Ability to project a comprehensive design based on an architectural idea, a building program and a site. The design or designs should integrate structural and environmental systems, building envelopes, building assemblies, life-safety provisions, and environmental stewardship.

From 2012 VTR:

The Comprehensive Design has undergone two iterations since the last VTR, with a third currently underway. The first iteration, as noted in the APR under the Program Self-Assessment of the 2007-08 Annual Report, identifies that this criterion is supported by the "Culture of Making" Studio. This has been revised in the second iteration, which is the presented evidence for this VTR, with the Vertical Studios modified by an "E" designation and supplemented by various technical courses, particularly ARCH513 and 531. Although it is understood that this criterion may be satisfied by more than one studio and/or course, this approach can lead to inconsistencies across student submissions and instructor requirements. This is the case in this instance. The "E" Studio elective addition to some of the studio work varies in depth and complexity, as demonstrated in the work exhibited, depending upon the instructor.

The team has a concern with the course outline of the E studio. The studio expectation of this studio summarizes that students elect and identify criteria to be incorporated into the design process as they relate to ecology. For the period of consideration for this assessment, the requirement for Comprehensive Design was included as a component called the E-Studio stream within the Vertical Studio sequence. Students were required to take E-Studio in at least one of the three required Vertical Studios. Students "identify which criteria they will be addressing in their work and pursue a design process so that results in a synthesis of those

criteria.” The E-Studio required students to relate social and cultural issues to defined areas of design and performance.

Environmental stewardship and sustainable design considerations are being incorporated and integrated to a large degree in vertical design studios and E-Studio. Yet the review team notes that analysis and application of basic building systems such as HVAC, plumbing and life safety are lacking or being displayed inconsistently throughout the displayed work. The focus of the UBC on ecology including social, cultural and economic aspects of environmental issues should be commended yet should not replace a student’s capability of evaluating and incorporating basic building systems, as required by this SPC.

From 2015 FE:

The CACB SPCs listed in the studio documentation indicate a good strategy for informing students about expectations for the assignments.

There are various assignments that cover program analysis, spatial experience, site, structure, light and ventilation, building code. However, there is a lack of evidence for site analysis and planning. The detailed drawings (1:20) are not convincing (structural components not illustrated) or missing.

Doubts were raised by the FE Team regarding students working in collaborative teams of two, as this arrangement could affect the ability for each student to respond to all of the SPCs. In this arrangement of team work, it is not possible to track the individual progress of each student so as to ensure that they are meeting all the SPCs related to the Comprehensive Studio.

2018 Visiting Team Assessment:

This criterion is now met.

4. Program Strengths

Program: The program shows strong concern for and response to contemporary urban, social and environmental issues.

Program Pedagogy: The program exhibits student work demonstrating a positive pragmatism, examining different project scales and taking the projects to completion. The strong technical curriculum and research projects support these endeavours.

Faculty: The Architecture Program has a strong and dedicated faculty which harbours a rich and collegial environment. Faculty work is active and diverse, engaging students and the community as the research topics provide; projects are broad based with locations extending beyond the borders of the province of British Columbia.

Students: The students appreciate the collegial community provided by SALA and are focussed on achieving a fulsome education. They are interested in bettering the School and improving the education experience for those who follow.

Administrative Staff: The administrative staff is strongly supportive of SALA and acknowledges the benefits that result from the restructuring of School governance which introduced five committees: Outreach, Student Affairs, Academic Infrastructure, Academic Affairs and Research; providing increased communication between staff, students and faculty.

Vertical Studios: Students and faculty support the vertical studio format within which collaboration is established amongst students in all years and with all skill levels.

5. Causes of Concern and Team's Recommendations

1. **Physical resources:** The program presence in the Lasserre Building has been cited in previous accreditation visits as "Not Met" due to shared and crowded space allocation, limited capacity for student gathering and teaching delivery, and general physical state. The issues pertaining to limited space are compounded by the inadequate quality of available spaces which include poor HVAC and disconnected facilities.
2. **Physical resources – Interim measures:** While the Visiting Team shares the enthusiasm of the Faculty of Applied Science and SALA over the prospect of a new consolidated facility within the next five years, the timeframe mandates interim measures to address the state of physical resources in the Lasserre Building for the current and expanding program demands.
3. **Program self-assessment:** There do not appear to be linkages between the assessments and the various committees within SALA and the Architecture Program. Greater connectivity and alignments between the program action plan and the outcomes of the self-assessment would yield greater insights in reaffirming the unique program identity and mission. Despite the excellent work exhibited, there is a lack of clarity in sharing a holistic strategy. SALA has embarked upon an improved governance structure that has reassessed hiring priorities and staff positions. In the 2018-19 academic year SALA will formally develop its strategic plan to align with University and Faculty level plans.
4. **Program Delivery:** Summer courses, required to be undertaken as part of the School 3+ year duration, are oversubscribed and not sufficient to meet demand, potentially resulting in prolonged program duration and graduation delay. There is a lack of rigour and consistency regarding communication from faculty and administration, particularly related to confirmation of Term Abroad and Study Abroad opportunities and advanced placement parameters, resulting in challenges to student program and budget planning.

5. **Diversity:** Equity, diversity and inclusivity within faculty, students, staff, sessional instructors and visiting critics are important considerations and do not appear to have been met to full advantage.
6. **Interdisciplinary Collaboration:** While SALA consists of both architecture and landscape architecture, the approximate one-kilometer distance between facilities in which they are each housed limits synergies between the two disciplines. Despite formal (courses) and informal (co-located studio environments) initiatives, a culture of interdisciplinary collaboration has yet to be fully leveraged.
7. **Professional Practice:** The courses *Professional Practice* and *Contemporary Practice* appear to satisfy most of the requirements within Leadership and Practice Student Performance Criteria category, however, with the dissolution of *Contemporary Practice*, the School will need to confirm that all SPC criteria within Leadership and Practice are met with the new course(s) offerings.
8. **Information Technology:** Students do not have access to a centralized computer facility to enable complex visualization and simulation, animation and digital outputs including digital fabrication and plotting.

III. Compliance with the Conditions for Accreditation

1. Program Response to the CACB Perspectives

Programs must respond to the relevant interests of the constituencies that make up the CACB: educators and regulators, as well as members of the practicing profession, students and interns, and the general public.

A. Architecture Education and the Academic Context

The program must demonstrate that it both benefits from and contributes to its institutional context.

Met Not Met
[X] []

Team Assessment:

There appeared to be a positive relationship between James Olson, Dean of the Faculty of Applied Science and Ron Kellett, Director of SALA. The Dean felt that SALA was poised for growth with a strong demand for placement by applicants, but that the Architecture Program was stymied by lack of space to accommodate additional students or courses. The Dean also noted that SALA was well positioned to contribute to a developing applied science identity focused on a *Hub for Human-Centered Design in the Built Environment*, a vision being put forward by the Faculty of Applied Science. The Architecture Program is well placed to continue to develop formal and informal synergies with the Landscape Architecture Program as well as the School of Community and Regional Planning.

Academic Affairs Vice-Provost and Associate Vice President, Eric Eich, noted that SALA was a strong but silent group, and that they could be more active and vocal in reaching for opportunities, financial or otherwise. There are potential sources of academic and financial support; SALA needs to explore, build and market the School case within the University context.

B. Architecture Education and the Students

The program must demonstrate that it provides support and encouragement for students to achieve their full potential during their school years and later in the profession, and that it provides an interpersonal milieu that embraces cultural differences

Met Not Met
[X] []

Team Assessment:

SALA supports and encourages its students to achieve their goals and fulfill their aspirations through diverse experiences (Co-op, Study Abroad, and Design-Build studios). A low faculty to student ratio in the Architecture Program encourages fertile discourse between students and faculty. Internal and external mentorship programs help to support students while in school and prepare them for the pragmatic challenges of the profession.

Additional follow-through by the School to ensure that students connect with mentors would enhance this valuable program.

The student governed group ARCHUS is very active. Its mission, “to encourage connections between students, faculty, and industry through annual social, wellness, and academic events”, is evident in the variety of networking and social events. Furthermore, ARCHUS provides an opportunity for students to develop their leadership skills, setting a solid foundation for their professional careers.

C. Architecture Education and Registration

The program must demonstrate that it provides students with a sound preparation for the transition to professional life, including internship and licensure.

Met Not Met
[X] []

Team Assessment:

Technical documentation required for coursework shows a good professional caliber both in quality and content. Student work demonstrates a level of diligence and commitment that will serve them well as professionals. The mentorship program initiated just before the last accreditation visit affords students with an opportunity to gain exposure to professional practice and career development. ARCH 541 Professional Practice and 543 Contemporary Practice provide an introduction to practice with particular emphasis on internship in ARCH 541 Professional Practice. As referenced in the Causes of Concern above, the dissolution and reconfiguring of these courses will need to be monitored and re-evaluated.

D. Architecture Education and the Profession

The program must demonstrate how it prepares students to practice and assume new roles within a context of increasing cultural diversity, changing client and regulatory demands, and an expanding knowledge base.

Met Not Met
[X] []

Team Assessment:

The evolution of the School program demonstrates that various strategies to reduce the gap between studies, the evolution of the profession and the practice of architecture have been integrated. Opportunities to interact with the professional community are offered through specific courses and studios.

Students are introduced to this through professional and contemporary practice courses, to construction through Design-Build studios and to the state of the profession through the Coop work program, the latter two being optional. However, in light of its popularity with students, the model of finance for the Design-Build studios may need to be re-examined.

A combined Architecture, Landscape Architecture and Urban Design program creates a rich opportunity for cross discipline collaborations. By including representatives from all disciplines in review panels this collaboration could be enhanced.

E. Architecture Education and Society

The program must demonstrate that it equips students with an informed understanding of social and environmental problems and that it also develops their capacity to help address these problems with sound architecture and urban design decisions.

Met Not Met
[X] []

Team Assessment:

The Program provides a broad spectrum of courses for students to experience, including exposure to other cultures, within Canada and beyond. Study Abroad and Term Abroad courses offer valuable involvement with diverse cultures including India, Japan and Europe. The students felt this program asset was an “*amazing experience*”, however, concern was voiced regarding the uncertainty and disorganization of the courses; often short notice was given with respect to course destination, syllabus and leadership. Students also expressed concern regarding fees for these courses as well as fees required to be paid for University terms while students were abroad; a correlation was made between the costs of the study abroad program and enrollment. However, the program did seem to accommodate most students.

Located in Vancouver, SALA offers access to a dynamic urban laboratory of global issues within which to study, physically and culturally. Bringing this population diversity into the SALA community would strengthen these opportunities. Ironically, the campus and School location also provide a sense of isolation for students, given the physical situation of the University on the peninsula surrounded by Pacific Regional Park and University Endowment Lands. The closing of the SALA studio in downtown Vancouver, compounded by the high cost of living pressuring students to live on campus, also lead to a sense of isolation from the city.

Students were enthusiastic about a course which incorporated a studio design project specific to a northern Canadian indigenous community. They did however indicate an apparent lack of engagement with the indigenous community which echoed the “*designing as an outsider*” sentiment voiced by the community.

2. Program Self-assessment

The program must provide an assessment of the degree to which it is fulfilling its mission and achieving its action plan.

Met Not Met
[X] []

Team Assessment:

SALA has embarked upon an improved governance structure that has reassessed hiring priorities and staff positions. In the upcoming 2018-19 academic year SALA will formally develop its strategic plan to align with University and Faculty level plans. In the meantime, the Team is concerned that there do not appear to be linkages between the assessments and the various committees within SALA and the Architecture Program. Greater connectivity and alignments between the program action plan and the outcomes of the self-assessment would yield greater insights in reaffirming the unique program identity and mission. Despite the excellent work exhibited, there is a lack of clarity in sharing a holistic strategy.

3. Public Information

The program must provide clear, complete, and accurate information to the public by including in its academic calendar and promotional literature the exact language found in Appendix A-1, which explains the parameters of an accredited professional degree program.

Met Not Met
[] [X]

Team Assessment:

- The exact language of Appendix A-1 has been found on the School web site (<https://sala.ubc.ca/about/accreditation> – consulted March 9, 2018). Graduate Calendars 2017-2018 and 2018-2019, however, have not been updated and do not systemically present the exact text. (UBC_Vancouver_Calendar_School_Architecture_and_Landscape_Architecture.pdf and <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,196,279,0> – consulted March 9, 2018).
- Proof that the *2012 Guide to Student Performance Criteria* was distributed to students and faculty has been provided (copies of emails in the *2017 APR*). However, evidence has not been found that current and previous *APRs* and *VTRs* have been stored according to article 5.3.1 of the *CACB 2012 Procedures for Accreditation*, about Public Disclosure of Accreditation Outcomes.
- The Team also notes that information about the program, namely its mission/vision, educational aims and main pedagogical objectives, is not clearly stated, lacking or incomplete on the SALA website.

It is also a cause of concern that information regarding the actual possibilities, realities and conditions for enrolling in special activities (Study Abroad, Term Abroad and Design-Build, for instance), as well as in summer elective courses, should be made more explicit. This also applies to information regarding the actual length of the program which, although advertised as 3 years, is rather a 3+ year program.

4. Social Equity

The accredited degree program must provide a summary of provincial and institutional policies that augment and clarify the provisions of the Charter of Rights and Freedoms as they apply to social equity.

Met Not Met
[X] []

Team Assessment:

UBC benefits from a number of policies directly focused on social equity, coming from the Federal government, the Provincial government, and the collective agreements between the University of British Columbia and faculty, administration and staff. UBC Equity Office also has a strong mandate in this regard. Public information on many UBC policies directly related to issues of social equality includes Employment Equity, Discrimination and Harassment, and Advertising of Position Vacancies, #73 Academic Accommodation for Students with Disabilities, and can easily be found on its website.

Students are actively involved in various SALA committees, as well as within ARCHUS and its initiatives, notably on health and wellness issues.

5. Human Resources

The program must demonstrate that it provides adequate human resources for a professional degree program in architecture, including a sufficient faculty complement, an administrative head devoting not less than fifty percent of his/her time to program administration, administrative and technical support staff, and faculty support staff

Met Not Met
[X] []

Team Assessment:

Faculty. Faculty are expected to fulfill teaching, research and service obligations (40%, 40% and 20% respectively). The new tenure-track hires have been engaging and enthusiastic participants in these three areas. Additionally, the utilization of sessional faculty members has been well-received by students for bringing industry knowledge as well as networks for programs abroad. The two 2017 fellowship positions have been a marked success with clear benefits found in the studio work.

Students. The MArch program has steadily increased its enrollment towards the goal of 60 students, up from 42 since the 2012 accreditation visit to 55 in 2017. This increase is a function of the proportion of advanced placement (AP) applicants (primarily those with pre-professional degrees in architecture) and large volumes of applicants from China and India as well as a recent spike in applicants from the United States since 2016. The majority of students enrolled are Canadian and the gender mix is close to equity with each cohort. While 40% of incoming students are AP students, the retention rate annually is around 85% with an average completion time of approximately 4.5 years (APR, page 82). While the enrollments have increased, the number of students graduating each year has steadily decreased since 2013. Students have expressed a great deal of interest in participating in a range of courses

and studios (including studios abroad and co-op opportunities) that extend their duration in the program beyond the outlined three-year curriculum presented to the public.

Administration. The Architecture Program enjoys academic autonomy within the Faculty of Applied Science while the Faculty of Graduate Studies supports administrative matters for graduate students. Though the Dean of the Faculty of Applied Science has only recently assumed his role, he has expressed support for SALA endeavors, most notably a new facility and increased interdisciplinary collaboration and communications within the Faculty. The SALA Director and Chair of Architecture have been providing academic and administrative leadership since the last accreditation visit and have done a great deal to advocate for the Architecture Program.

Staff. Over the past two years the administrative staff have been given greater agency within SALA as five committees have been created that include both a faculty and staff member to provide insights on: outreach, student affairs, academic affairs, academic infrastructure, and research. This has been positively received and has opened opportunities for greater collaboration among facets of the program. Within the workshop, student employees are hired to ensure safe and consistent access to the facilities made available to SALA students. Positions for secretary and library assistant are vacant, however there are opportunities to adjust the job descriptions to align with the Program trajectory.

6. Human Resource Development

Programs must have a clear policy outlining both individual and collective opportunities for faculty and student growth within and outside the program.

Met	Not Met
[X]	[]

Team Assessment:

Faculty. Substantively, the allocation of funding for expenses related to Professional Development, \$2500, remains the same as at the time of the 2012 VTR. There are UBC funding sources which promote faculty research through the Teaching and Learning Fund, Hampton Fund Research Grants and Study Leave Research Grants which faculty members have capitalized on in recent years. UBC also offers a Centre for Teaching and Academic Growth which is available to SALA faculty wishing to pursue professional development.

Students. The school presents a number of student growth opportunities with varying levels of formality and integration. Programs such as mentoring with outside professionals, Design-Build studios, Study Abroad courses and the full Term Abroad are all highly valued by the student population. These programs are also part of the promotional material presented by the School.

There is substantial variation in the delivery of each of these initiatives from year to year. The Term Abroad program is not guaranteed to occur. Further to this, the cost recovery model of the Term Abroad is prohibitive for many students and limits access to this growth

opportunity. Likewise, the funding for transportation, freight and materials in the Design-Build studio is not formally integrated into the program so course delivery is not consistent. The mentoring program has also not been consistently implemented. These short comings are countered by a substantial appreciation that students are allowed to take a very flexible approach to capitalizing on the growth opportunities. The challenge is to bring enough structure to the growth opportunities so that they are seen as consistent and reliable.

The ARCHUS student leadership and representative body appears to be a vibrant entity fostering social activity while serving as a conduit for student representation on various faculty and administrative committees. There is evidence of numerous student work opportunities as teaching assistantships and technical support, however, there appear to be fewer opportunities to assist with faculty research.

7. Physical Resources

The program must provide physical resources that are appropriate for a professional degree program in architecture, including design studio space for the exclusive use of each full-time student; lecture and seminar spaces that accommodate both didactic and interactive learning; office space for the exclusive use of each full-time faculty member; and related instructional support space

Met Not Met
[] [X]

Team Assessment:

The Program presence in the Lasserre Building has been cited in previous accreditation visits as “Not Met” due to its general physical state and shared and crowded space allocation which limits its capacity for student gathering and teaching delivery. The issue of overcrowding is exacerbated by the fact that the Lasserre Building houses an eclectic complement of shared facilities (workshop and plotting resources) and programs (including the School of Community and Regional Planning, Art History / Fine Arts and Music). Recent internal and external reports have emphasized that SALA facilities do not adequately serve projects and pedagogical objectives.

The inability to conduct work in a properly conditioned and secure facility has been expressed by students and faculty as a cause of concern. Issues pertaining to limited space are compounded by the inadequate quality of available spaces which include poor HVAC and disparate facilities. While the studios have been configured with reasonable space allocations, the supporting spaces including, the workshop, digital fabrication facilities, plotting and computing resources and meeting areas are constrained and stressed for use. The shared use of limited resources such as the fabrication shop, plotting, and computing equipment compromises productivity and safety particularly at course deadlines.

The resourcefulness of the faculty in finding research and exhibition spaces both on and off campus is remarkable. The lack of space in the Lasserre Building for faculty research has prompted faculty to disperse their research work in various facilities across campus or hold

teaching engagements (in some cases in their private practice) off-campus. The SALA faculty has been fortunate and resourceful in maintaining a presence in the downtown core with presentation spaces in retail venues and storefronts for lectures and exhibitions.

As might be expected, there is clarity on the formal process required to approve and construct a new facility on the UBC campus through the Capital Planning process (see Appendix D). There is also clarity and consensus that the timeline of the process is, at a minimum, five years to project completion. At the time of the current accreditation visit, there have been discussions among the Dean of Applied Science, SALA Director and Chair of Architecture, on the organization, scope of work, and timeline for the prospective *Hub for Human-Centered Design in the Built Environment* to be situated in the Applied Science precinct on the Main Mall. The initial proposal calls for a \$200M consolidated facility of over 30,000 sm shared with SALA, the School of Community and Regional Planning, the School of Nursing, and expanded interdisciplinary engineering programs. A prominent component of this facility is “state-of-the-art Applied Science maker spaces” for research, teaching, and community engagement. The first executive approval is anticipated to occur in 2018 and final Board approval in 2021.

There has been no formal or informal mention of expansion, renovation or space reclamation within the Lasserre Building. A specific note of concern pertaining to the building raised in the previous VTR was that “At the very minimum, the Lasserre Building should be upgraded seismically” as the building “does not meet the seismic requirements for the area.” There is no evidence that actions have been taken to address this since the last visit.

Fundamentally, growth and increasing engagement must be regarded as positive for the Architecture Program and the profession. However, it is incumbent on the University to provide appropriate and adequate physical resources to meet the demands of a professional program.

8. Information Resources and information technology

The architecture librarian and, if appropriate, the staff member in charge of visual resource or other non-book collections must prepare a self-assessment demonstrating the adequacy of the architecture library.

For Information Technology Resources, the program must also provide the information technology infrastructure and corresponding staff support in order to effectively contribute to the delivery of the curriculum, as well as supporting activities of staff and faculty.

Met	Not Met
[X]	[]

Team Assessment:

Information resources. Information resources for SALA are scattered across the campus. The primary architectural collection is housed within the Music, Art & Architecture Library at the Irving K. Barber Learning Centre. Also contained within this building are the Rare Books and Special Collections containing a non-circulating collection of rare books, manuscripts,

historical maps, photographs and archives. At the Koerner Library, students have access to a Geographic Information Systems (GIS) lab with 43 workstations.

As there is a general trend for libraries to acquire less print books and move towards more online resources and publications, it becomes increasingly complex to quantify resources. The UBC library purchases large multi-disciplinary packages of electronic journals and electronic books from core publishers. As a result, specific costs for individual subject areas cannot be broken down into discrete figures. However, the librarian self-assessment shows that through the existing print collection of 35,885 volumes and the 86 architecture journals the architecture collection is adequate.

The Architecture Reading Room and Audio-Visual Store is located on the lower floor of the Lasserre Building. It provides a small study space and contains a selection of architecture journals, books, design theses and school archives dating back to 1951. Students can sign out audio-visual equipment (laptops, digital and slide projectors, TVs and VCRs, digital cameras, camcorders, wireless microphones, 35 mm cameras, and photography equipment), access online library databases, CD burners, and use copy machines. The annual budget for the reading room is \$4,000 to cover journal subscriptions, binding costs, and new books. There is no dedicated full-time staff member, the space is operated by work-study students.

Information technology. There is no computer lab for the architecture students at SALA, however, there is a small number of computers available in the studio space for student use. Students are required to provide their own laptop computers and acquire software individually. Costs for students could be saved and the media portion of the curriculum would be more effectively delivered if there was a dedicated computer lab with the appropriate software purchased at education institution pricing. Due to the outsourcing of IT services, the students have noted that the software available on the few computers provided is not consistent and licenses sometimes expire, rendering certain programs useless until they can be rectified by the external IT service.

In 2011 the SALA IT department was centralized to the UBC IT department. The department has hired one student to manage all student plotting and computer issues within the building. The students have voiced concern over their ability to print for deadlines given the requirement to load their projects onto a small number of computers located in studio as there is no dedicated computer lab.

9. Financial Resources

Programs must have access to sufficient institutional support and financial resources.

Met	Not Met
[X]	[]

Team Assessment:

Overall, SALA budget seems congruent with its activities and the MArch program, through SALA, enjoys a steady financial state (with reference to the APR spreadsheet showing a breakdown and forecasts of finances). Financial initiatives or resources available to support or impact the Program include:

- A non-credit summer program, initiated by SALA Director, as a fundraising venture providing increased exposure of the SALA Programs to future students.
- The development of four university-wide service courses providing funding through undergraduate tuition fees.
- The expansion of the Study Abroad course, allowing an increased intake of approximately 12 MArch students (since 2015).
- The increase of the MArch Advanced Placement cohort, who typically move through their course of study in approximately one year less than do non-Advanced Placement stream students (since 2015).
- An increase of nearly 100% in scholarships distributed since the 2011 APR.
- The 2011 APR reported an accumulated balance of approximately \$120,000 in outside donations used for public lectures, student scholarships, bursaries and support for studies abroad.
- The approval of a UBC Teaching and Learning Enhancement Fund Grant to explore the integration of digital and manual making tool and spaces throughout the SALA programs.
- The Design-Build course has achieved a self-funded status; additional institutional support would relieve students of the burden of additional fundraising.
- The development of finance-generating programs such as the Master of Engineering Leadership – High Performance Buildings and the Bachelor of Environmental Design.

10. Administrative Structure (Academic Unit & Institution)

The program must be part of, or be, an institution accredited by a recognized accrediting agency for higher education. The program must have a degree of autonomy that is both comparable to that afforded to the other relevant professional programs in the institution and sufficient to assure conformance with all the conditions for accreditation.

Met	Not Met
[X]	[]

Team Assessment:

The University of British Columbia is accredited and operates under the authority of the University Act of the Province of British Columbia. It is also a member of the Association of Universities and Colleges of Canada. The administrative structures of the University of British Columbia and the Faculty of Applied Science are provided, as well as that of SALA, SALA Council, SALA Committee Governance and the MArch program. Within this academic setting, SALA benefits from a degree of autonomy comparable to the other professional schools, units or programs of the university, School of Community and Regional Planning for instance. The Director administrative duties are well defined and effectively conducted, as are those of the Program Chair.

11. Professional Degrees and Curriculum

The CACB awards accreditation only to first-professional degree programs in architecture. These include:

- *Master of Architecture degree with a related pre-professional bachelor's degree; requirement, typically amounting to five or six years of study;*
- *Master of Architecture degree without a pre-professional requirement, consisting of an undergraduate degree plus a minimum of three years of professional studies;*
- *Bachelor of Architecture degree requiring a minimum of five years of study, except in Quebec, where four years of professional studies follows two years of CEGEP studies.*

The curricular requirements for awarding these degrees must include three components: general studies, professional studies, and electives that respond to the needs of the institution, the architecture profession, and the students respectively.

Met Not Met
[X] []

Team Assessment:

SALA offers a Master of Architecture degree, without a pre-professional requirement, which consists of three years of professional studies. The degree includes the required components of general studies (through a variety of undergraduate degrees), professional studies and electives.

12. Student Performance Criteria (SPC)

Each architecture program must ensure that all its graduates possess the skills and knowledge defined by the performance criteria set out below, which constitute the minimum requirements for meeting the demands of an internship leading to registration for practice. The program must provide evidence that all its graduates have satisfied each criterion through required course work

A1. Critical Thinking Skills

Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards.

Met Not Met
[X] []

Team Assessment:

This criterion is met in ARCH 505 Architectural History 1B, ARCH 523 Contemporary Theories, ARCH 568 Research Methods, as well as in ARCH 549 Graduate Project 2: Design Thesis.

A2. Research Skills

Ability to employ basic methods of data collection and analysis to inform all aspects of the programming and design process.

Met Not Met
[X] []

Team Assessment:

The team observed a general ability to collect and analyze data. ARCH 568 Research Methods develops a solid foundation for subsequent research in the thesis projects where a wide range of methods of research are demonstrated.

A3. Graphic Skills

Ability to employ appropriate representational media to convey essential formal elements at each stage of the programming and design process.

Met Not Met
[X] []

Team Assessment:

This criterion is met through ARCH 515 Design Media I and ARCH 517 Design Media II which are well sequenced to introduce more traditional methods of graphic representation followed by more current digital technologies. A wide range of graphic representation is seen in these work.

A4. Verbal and Writing Skills

Ability to speak and write effectively on subject matter contained in the professional curriculum.

Met Not Met
[X] []

Team Assessment:

Students demonstrate the ability to verbally communicate architectural ideas in ARCH 505 Architectural History 1B, ARCH 523 Contemporary Theories, ARCH 568 Research Methods studio, and in ARCH 549 Graduate Project 2: Design Thesis.

A5. Collaborative Skills

Ability to identify and assume divergent roles that maximize individual talents, and to cooperate with others when working as members of a design team and in other settings.

Met Not Met
[X] []

Team Assessment:

Collaborative skills are prominent in many instances within course work and design studio. Teamwork and group contributions on comprehensive assessments such as technical case studies (ARCH 513 Environmental Systems & Controls I) and seminars (ARCH 523 Contemporary Theories) result in robust projects. Collaborative skills are

prominent in many instances within the design studios. ARCH 501 Vertical Design Studio specifically provides students an opportunity to share ideas, skills and perspectives in the synthesis of a design project.

A6. Human Behavior

Understanding of the relationship between human behavior, the natural environment and the design of the built environment.

Met Not Met
[] [X]

Team Assessment:

Although part of this criterion is addressed in some of the vertical studio sections and in ARCH 513 Environmental Systems & Controls I, the focus on human behavior is not consistently met by all students.

A7. Cultural Diversity

Understanding of the diverse needs, values, behavioral norms, and social/spatial patterns that characterize different cultures and individuals, as well as the implications of this diversity on the societal roles and responsibilities of architects.

Met Not Met
[] [X]

Team Assessment:

Evidence of *understanding* has not been found in student work. Syllabuses for ARCH 504 Architectural history I and ARCH 505 Architectural history II mention the SPC as an instance of "Awareness of cultural diversity". It is not a clear and consistent objective (at the understanding level) in ARCH 504/505 Advanced Architectural History (whose content may change from one semester to the other) nor in ARCH 523 Contemporary Theories.

A8. History and Theory

Understanding of diverse global and local traditions in architecture, landscape, and urban design, as well as the factors that have shaped them.

Met Not Met
[X] []

Team Assessment:

The Program presents an interesting outlook on thematic approaches to history and theory, especially in ARCH 504 Architectural History I, ARCH 505 Architectural History II, ARCH 504/505 Advanced Architectural History, beginning with the 18th Century and leading up to more current global and local analysis of architecture. This criterion is also addressed in ARCH 523 Research Methods.

A9. Precedents

Ability to make a comprehensive analysis and evaluation of a building, building complex, or urban space.

Met Not Met
[X] []

Team Assessment:

Evidence of *ability* is demonstrated in ARCH 505 Architectural History II.

B1. Design Skills

Ability to apply organizational, spatial, structural, and constructional principles to the conception and development of spaces, building elements, and tectonic components.

Met Not Met
[X] []

Team Assessment:

Architectural design skills are present in course work and studio projects, especially in assessments where technical course materials are applied in design contexts. Assessments including the *Fast & Epp Competition* in ARCH 532 Structures II and iterative exercises in ARCH 551 Communicating Construction highlight the rigor of structural and constructional understanding students develop in design projects. This integrative pedagogy cascades into the design studios where students apply their technical acumen in their design work. The integration of design and technical application is most evident in ARCH 521 Comprehensive Design Studio. The volume and overall scope of work presented illustrate the benefit of working in teams. Although attributing performance on an individual basis is challenging, as noted in the 2012 VTR, there has been an effort to introduce progression and development of the project on an individual basis toward the end of the term. While there is a considerable synthesis of spatial, structural, and constructional principles in the core studios, it is less consistent in ARCH 549 Graduate Project 2: Design Thesis.

B2. Program Preparation

Ability to prepare a comprehensive program for an architectural project that accounts for client and user needs, appropriate precedents, space and equipment requirements, the relevant laws and standards, and site selection and design assessment criteria.

Met Not Met
[X] []

Team Assessment:

There are examples in studio work where basic program preparation and compliance with regulatory parameters exist. ARCH 521 Comprehensive Design Studio demonstrates application of a syllabus derived program to organize space and equipment requirements. The volume of work required in this project would suggest that there is not sufficient time to create a student generated program. Project work in ARCH 548

Graduate Project 1: Directed Study illustrates detailed analysis of client requirements and functional relationships but notably, syllabuses for ARCH 548 Graduate Project 1: Directed Study and ARCH 549 Graduate Project 2: Design Thesis imply that a formal program is not always applicable. These projects consistently explore and demonstrate inquiry into programming and client needs initiation, however do not consistently resolve spatial propositions.

B3. Site Design

Ability to analyze and respond to context and site conditions in the development of a program and in the design of a project.

Met	Not Met
[X]	[]

Team Assessment:

This criterion is profiled through numerous studio samples. There is a good quantity of examples in ARCH 501 Vertical Design Studio and ARCH 521 Comprehensive Design Studio which demonstrate capacity to site a building in its context. There is less evidence of site design which seeks to manipulate site characteristics beyond the structural footprint. Some of the ARCH 501 Vertical Design Studios address pedestrian and vehicular access as well and hard and soft surface design but this could be more consistent throughout the studios.

B4. Sustainable Design

Ability to apply the principles of sustainable design to produce projects that conserve natural and built resources, provide healthy environments for occupants/users, and reduce the impacts of building construction and operations on future generations.

Met	Not Met
[X]	[]

Team Assessment:

Student application of fundamental sustainable design strategies are most evident in ARCH 513 Environmental Systems & Controls I and ARCH 533 Environmental Systems & Controls II. While there is a propensity for passive design strategies, there is little evidence of student awareness of the implications of sustainable design on a range of dimensions including occupant health and construction lifecycles. Applications in ARCH 521 Comprehensive Design Studio could be more consistent.

B5. Accessibility

Ability to design both site and building to accommodate individuals with varying physical and cognitive abilities.

Met	Not Met
[]	[X]

Team Assessment:

The level of sensitivity to accessibility in architectural design is not consistent in the studio work. While there are excellent highlights in one section of ARCH 501 Vertical Design Studio (The New Normal) that pertain to accessibility challenges, it is not evident in other sections of the studio. Student work presented inconsistent ability to design interventions into sites to accommodate accessibility needs. The level of accessible design in ARCH 551 Communicating Construction is fairly limited and speaks to students' ability to document accessible layouts but does not demonstrate the ability to design them.

B6. Life Safety Systems, Building Codes and Standards

Understanding the principles that inform the design and selection of life-safety systems in buildings and their subsystems; the codes, regulations, and standards applicable to a given site and building design project, including occupancy classifications, allowable building heights and areas, allowable construction types, separation requirements, occupancy requirements, means of egress, fire protection, and structure.

Met	Not Met
[X]	[]

Team Assessment:

ARCH551 Communicating Construction demonstrates specific application of codes and standards through the detailing of a barrier-free washroom. Alternatively, the broader interpretation of the National Building Code is demonstrated in ARCH 521 Comprehensive Design Studio with the completion of a code matrix. There is sufficient evidence of the understanding of this criterion at both the detail level and in the broader context.

B7. Structural Systems

Understanding of the principles of structural behavior in withstanding gravity and lateral forces, and the evolution, range and appropriate applications of structural systems.

Met	Not Met
[X]	[]

Team Assessment:

The structures curriculum is quite strong in its scope and application in design contexts in courses and studios. Initiatives such as design projects (*Epp & Fast competition*) and interdisciplinary feedback mechanisms are effective pedagogical tools. This level of integration is also evident through various phases in ARCH 521 Comprehensive Design Studio.

B8. Environmental Systems

Understanding of the basic principles that inform the design of environmental systems, including acoustics, illumination and climate modification systems, building envelopes, and energy use with awareness of the appropriate performance assessment tools.

Met Not Met
[X] []

Team Assessment:

Student work from ARCH 513 Environmental Systems & Controls I and ARCH 533 Environmental Systems & Controls II demonstrates that students are introduced to concepts, learn to apply them in examples and then synthesize and develop them in studio projects. Appropriate strategies for diverse climates show current best practices for acoustics, illumination and climate modification systems.

B9. Building Envelopes

Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

Met Not Met
[X] []

Team Assessment:

Student work from ARCH 511 Architectural Technology I and ARCH 513 Environmental Systems & Controls I shows that students understand fundamental concepts and can apply them in exercises and synthesize that information for studio projects. Relevant best practices are shown in detailed exercises for a plausible range of conditions in common building envelopes.

B10. Building Service Systems

Understanding of the basic principles that inform the design of building service systems, including plumbing, electrical, vertical transportation, communication, security, and fire protection systems.

Met Not Met
[X] []

Team Assessment:

Work from ARCH 511 Architectural Technology I, ARCH 531 Architectural Technology II, ARCH 513 Environmental Systems & Controls I, ARCH 533 Environmental Systems & Controls II collectively cover a broad range of relevant issues and appropriate systems. They are developed and applied in course exercises and studio projects. The work shows exposure to a full range of current best practice systems. Vertical transportation is less evident than other systems. Projects showing minimum pass were still comprehensive in issues addressed.

B11. Building Materials and Assemblies

Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance.

Met Not Met
[X] []

Team Assessment:

Work from ARCH 511 Architectural Technology I, ARCH 531 Architectural Technology II, ARCH 513 Environmental Systems & Controls I and studios shows a comprehensive understanding of the constraints and opportunities of building materials and assemblies with respect to building envelopes. The more successful work displays a high degree of competence in representation and understanding at a professional skill level. Class assignments include opportunities for reflection and revision of previous work.

B12. Building Economics and Cost Control

Understanding of the fundamentals of development financing, building economics, construction cost control, and life-cycle cost accounting.

Met Not Met
[] [X]

Team Assessment:

There is little evidence of student understanding of the economics of the architecture engineering construction industries and methods of mitigating costs. ARCH 568 Research Methods does not demonstrate understanding of these topics. In the few instances these do appear in student assignments, they are nested in courses and fairly rudimentary.

C1. Detailed Design Development

Ability to assess and detail as an integral part of the design, appropriate combinations of building materials, components, and assemblies.

Met Not Met
[X] []

Team Assessment:

Student work from ARCH 532 Structures II and ARCH 521 Comprehensive Design Studio shows a full range of development from the overall building section to focused detail studies appropriate and representative of the overall design. Pragmatic constraints were often successfully addressed through a variety of creative approaches addressing the overall architectural concept.

C2. Building Systems Integration

Ability to assess, select, and integrate structural systems, environmental systems, life safety systems, building envelopes, and building service systems into building design.

Met Not Met
[X] []

Team Assessment:

Student work from ARCH 512 Structures I, ARCH 532 Structures II, ARCH 511 Architecture Technology I, ARCH 531 Architecture Technology II, ARCH 513 Environmental Systems & Controls I, ARCH 533 Environmental Systems & Controls II and from ARCH 548 Graduate Project I: Directed Study displays a wide range of creative architectural solutions to technical problems. High end work shows a strong degree of professional competence, while low end work shows comprehension of issues.

C3. Technical Documentation

Ability to make technically precise descriptions and documentation of a proposed design for purposes of review and construction.

Met Not Met
[X] []

Team Assessment:

Student work from ARCH 521 Comprehensive design studio shows an accomplished level of graphic and written technical documentation. Details are developed to a high degree of clarity, competence and completeness expected in a professional working drawing package. Although work in ARCH 501 Vertical Design Studio does not always show strong technical documentation, it often goes beyond schematic resolution.

C4. Comprehensive Design

Ability to project a comprehensive design based on an architectural idea, a building program and a site. The design or designs should integrate structural and environmental systems, building envelopes, building assemblies, life-safety provisions, and environmental stewardship.

Met Not Met
[X] []

Team Assessment:

Work from ARCH 521 Comprehensive design studio and supporting courses shows an exemplary level of integrated design solutions addressing multiple technical constraints while reinforcing broader architectural concepts. Presentation packages illustrate a full range of architectural discourse from poetic intent to pragmatic solutions. Illustrations are often evocative and highly descriptive. The Team acknowledges the effort and energy undertaken by the MArch Program in reshaping the comprehensive design studio, as well as the results that were presented.

D1. Leadership and Advocacy

Understanding of the techniques and skills for architects to work collaboratively with allied disciplines, clients, consultants, builders, and the public in the building design and construction process, and to advocate on environmental, social, and aesthetic issues in their communities.

Met Not Met
[X] []

Team Assessment:

This criterion is met through the two complementary courses ARCH 541 Professional Practice and ARCH 543 Contemporary Practice.

D2. Ethics and Professional Judgment

Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

Met Not Met
[X] []

Team Assessment:

Evidence of understanding has been found in ARCH 541 Professional Practice. It is appropriate that this course is taught in part by registered architect as this perspective brings forward the considerations particular to architecture practice.

D3. Legal Responsibilities

Understanding of the architect's responsibility to the client and the public under the laws, codes, regulations and contracts common to the practice of architecture in a given jurisdiction.

Met Not Met
[X] []

Team Assessment:

Understanding of the architect's responsibilities to the client and the public are provided through ARCH 541 Professional Practice, in particular regarding the contract administration phase.

D4. Project Delivery

Understanding of the different methods of project delivery, the corresponding forms of service contracts, and the types of documentation required to render competent and responsible professional service.

Met Not Met
[] [X]

Team Assessment:

The requirements are not met through ARCH 541 Professional Practice. The syllabus supports an understanding of CCDC2 project delivery, however, there was no evidence

provided (through student assignments or exams) to confirm understanding of more than one project delivery method.

D5. Practice Organization

Understanding of the basic principles of practice organization, including financial management, business planning, marketing, negotiation, project management, risk mitigation and as well as an understanding of trends that affect practice.

Met Not Met
[] [X]

Team Assessment:

The requirements do not appear in syllabuses or student work provided, unobserved subjects include financial management, business planning and negotiation.

D6. Professional Internship

Understanding of the role of internship in professional development, and the reciprocal rights and responsibilities of interns and employers.

Met Not Met
[X] []

Team Assessment:

The criterion is met through the delivery of ARCH 541 Professional Practice.

IV. Appendices

Appendix A: Program Information

The following is condensed from the Program's Architecture Program Report

1. Brief History of the University of British Columbia

The University of British Columbia is a publicly supported, comprehensive university comprising twelve Faculties, fourteen Schools, almost 70 centers and institutes and four affiliated teaching hospitals. UBC is the third largest university in Canada and the oldest in the province. It is consistently ranked as one of the top three Canadian universities and ranks thirty-sixth – and among the top twenty public institutions – in the world in the 2016- 2017 *Times Higher Education World University Rankings*.

Incorporated by the provincial government in 1908, UBC admitted its first students in 1915. It moved to its present Point Grey location in 1925 following the “Great Trek” which had convinced the Provincial Government to resume the construction that had been halted by the First World War. Today almost 500 buildings occupy a 400-hectare campus, with downtown facilities in Robson Square and a separate Okanagan campus. The Vancouver campus educates more than 63,000 undergraduate and graduate students each year, representing 140 different countries.

2. Institutional Mission

Place and Promise: The UBC Plan (August 2012). UBC is actually developing a new Strategic Plan.

Vision: As one of the world's leading universities, The University of British Columbia creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world.

Values

- *Academic freedom:* The University is independent and cherishes and defends free inquiry and scholarly responsibility.
- *Advancing and sharing knowledge:* The University supports scholarly pursuits that contribute to knowledge and understanding within and across disciplines and seeks every opportunity to share them broadly.
- *Excellence:* The University, through its students, faculty, staff, and alumni, strives for excellence and educates students to the highest standards.
- *Integrity:* The University acts with integrity, fulfilling promises and ensuring open, respectful relationships.
- *Mutual respect and equity:* The University values and respects all members of its communities, each of whom individually and collaboratively makes a contribution to create, strengthen and enrich our learning environment.

- *Public interest*: The University embodies the highest standards of service and stewardship of resources and works within the wider community to enhance societal good.

3. Program History

The establishment of the School of Architecture at UBC in 1946 was shaped by circumstances of geographic isolation and historical immediacy. After more than 60 years of producing professional graduates, it is fair to observe that the condition of metropolitan Vancouver itself may serve as the most direct testimony to the work of the School over time. Indeed, the origins of a distinctive ‘West Coast’ design idiom and its continuing development are directly linked to the work of students, faculty and graduates of the UBC School.

The School’s early identity was deliberately modernist, largely defined by the first School Director Frederic Lasserre whose vision of the modern project in architecture was set in a program that advocated, in his own words “breaking away from studying the earlier practice of applying old architectural designs to modern needs.” Lasserre’s ambition for a modern and functional design sensibility was given pointedly didactic presence in the completion of the purpose-built Lasserre Building for the School of Architecture in 1962. Appropriate to the shifting social circumstances which characterized the 1960s, the philosophical position of the School found expression in deliberate community activism undertaken by faculty and students alike. The School was actively engaged in significant local planning issues.

From 1990 to 1998, the program shifted the existing Bachelor of Architecture to a graduate Master of Architecture (MArch) program; developed key outreaches in the community, particularly securing and renovating a permanent downtown location. Between 1999 and 2005, the undergraduate Bachelor of Environmental Design (ENDS) program was introduced, as well as the amalgamation of the School of Architecture and the Landscape Architecture Program into the School of Architecture and Landscape Architecture (SALA). Many governance elements of the Architecture Program were consolidated under the SALA umbrella. A new post- professional Master of Urban Design (MUD) degree program began in September 2014 and Canada’s first dual professional degree Architecture and Master of Landscape Architecture (MARCLA) began. The period from 2014 to 2017 saw the development of the cross-disciplinary (MArch and MLA) core curriculum. Since spring 2015, goals of uniting the SALA programs in a new facility are being pursued, as well as refining the governance model of an expanding SALA. Begun in fall 2016, a branding consultant has led SALA faculty constituencies in an exercise that will provide the principles for these challenges, and inform new SALA strategic planning, research and outreach activities.

4. Program Mission

The Architecture Program Strategic Plan is coordinated with the encompassing School of Architecture and Landscape Architecture Strategic Plan and supports *Place and Promise: The UBC Plan*, sharing in its commitment to student learning, community engagement and

research excellence, and its engagement with Aboriginal, intercultural and international engagement and sustainability.

Vision: The Architecture Program of the School of Architecture and Landscape Architecture's core responsibility is design education. Through teaching, professional endeavors, research and scholarly activities, the Program is committed to the production of outstanding graduates equipped to provide the necessary design and intellectual capabilities that will contribute to a built environment that supports civil and sustainable patterns of living.

5. Program Strategic Action Plan

The Architecture Program has three overarching commitments: **enhanced student learning, productive community involvement, and research excellence.**

Commitment #1: Teaching

Provide an outstanding and distinctive professional education directed toward the breadth and complexity of issues germane to contemporary built and natural environments.

- Goal 1: Address unmet Student Performance Criteria through continued review and refinement of the disciplinary core of architectural education.
- Goal 2: Continue to build the Program's national and international profile.
- Goal 3: Enhancing the educational opportunities that foster inter-disciplinary collaboration and cross-cultural learning.
- Goal 4: Enhance the quality of student life in the Program.
- Goal 5: Support the Program's faculty.
- Goal 6: Improve the Program's physical resources.
- Goal 7: Enhance the Program's Administration.

Commitment #2: Community

Engage with a wide range of constituencies in the larger community – academic, professional practice and public - and bring these associations directly to bear on its educational and administrative priorities.

- Goal 1: Strengthen academic ties.
- Goal 2: Strengthen professional ties.
- Goal 3: Strengthen community ties.
- Goal 4: Strengthen international ties.

Commitment #3: Research

Engages in leading edge design research and scholarship activities that contribute constructively to the theory and practice of architecture.

- Goal 1: Nurture and support leading edge design research and scholarship.
- Goal 2: Support faculty research.
- Goal 3: Support graduate student research.
- Goal 4: Remain current in design theory, practice and advocacy.

Appendix B: The Visiting Team

Voting members:

Myriam Blais – Chair Educator
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Lindsay Andreas Intern
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Non-voting members – Observers

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Vincent Hui CACB Observer
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Jim Nicholls Program Observer
Educator
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Seattle WA 98105
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Cell: (206) 779 1461
E-mail: jnicholl@uw.edu

Appendix C: The Visit Agenda

SCHEDULE FOR CACB ACCREDITATION VISIT TO UNIVERSITY OF BRITISH COLUMBIA - MARCH 17-21, 2017

Day	Start	Duration	Event	Location	Team members	Attendees			
Saturday	March 17	PM	early pM	Visiting Team members arrive in Vancouver		all	n/a		
			early PM	Visiting Team members check in at the hotel <i>note: check in at 3:00pm - see front desk about luggage storage</i>	West Coast Suites UBC Campus 5959 Student Union Boulevard	all	n/a		
		01:30	01:30	Team-only lunch; introductions and orientation	TBA on campus	all	n/a		
		around 3:00	:30	Entrance meeting with Program Chair and SALA Director	LSSR 205	all	John Bass, Ron Kellett		
		around 3:15	:30	Overview of the team room (including exhibition)	LSSR 202	all	John Bass		
		03:45	01:00	Tour of the facilities - with Program Chair and Facilities Manager	LSSR Bldg	all	John Bass Nick Scott		
		04:45	02:00	APR review and assembly of issues and questions	LSSR 202	all	n/a		
		06:30	02:00	Team-only dinner	La Brass - 4473 West 10th Ave. www.labrass.co	all	n/a		
		08:30	01:30	APR review and assembly of issues and questions	LSSR 202 or hotel	all	n/a		
	Sunday	March 18	AM	07:30	01:30	Team working breakfast - Catered	LSSR 205	all	n/a
09:00				03:30	Initial review of exhibits and records	LSSR 202	all	n/a	
		PM	12:30	01:30	Team lunch with Administrators (catered)	LSSR 205	all	Ron Kellett - SALA Director John Bass - Chair ARCH Susan Herrington, Chair LARC Bill Pechet/Mari Fujita, Chair ENDS Sara Stevens, Chair MUD Hanne Bartlett - Admin Tara Deans, Student Services Mgr Jaynus O'Donnell, ARCH Student Support	
02:00			02:00	Entrance meeting with architecture faculty	LSSR 301	all	All Architecture Full Time Faculty Members Selected Adjunct Faculty Members		
			04:00	01:00	Faculty introduction to design work in the exhibition	LSSR 202	all	John Bass	
			05:00	01:30	Continued review of exhibits and records	LSSR 202	all	n/a	
			06:30	02:00	Team-only dinner	Enigma - 4997 West 10th Ave. www.enigmarestaurant.ca	all	n/a	
			08:30		Debriefing session	LSSR 202 or hotel	all	n/a	
Monday		March 19	AM	07:30	01:30	Team working breakfast (with the Director if required by the Chair)	Open Kitchen (on campus) Orchard Commons - 6363 Agronomy Road	all	n/a
				09:00	00:50	Entrance meeting with the Dean of the Faculty of Applied Sciences	KAISER 5000	all	Dr. James Olson
				10:00	01:00	Entrance meeting with the UBC Vice-Provost and Associate Vice-President, Academic Affairs, Dr. Helen Burt, Associate VP Research & Innovation and Dr. Theresa Rogers, Associate Dean, Graduate and Postdoctoral Studies	Old Administration Building, 6328 Memorial Road, Room 100	all	Visiting Team Dr. Eric Eich Dr. Helen Burt Dr. Theresa Rogers
			PM	12:00	01:30	Lunch with selected faculty - Catered	LSSR 301	all	John Bass Greg Johnson Annalisa Meyboom Inge Roecker Adam Rysanek Blair Satterfield
				01:30	01:00	Meeting with Librarian and tour of library facilities	UBC Library Music, Art & Architecture Library 414 - 1961 East Mall	half the team	Paula Farrar
		01:30		01:00	Meeting with School Special Activities Principals	LSSR 301	half the team	Emma Fennell Greg Johnson Leslie Van Duzer ARCHUS delegate	
			02:30	01:00	School-wide entrance meeting with students	Michael Smith Labs Room 102 2185 East Mall	all	Architecture Students	
			03:30	01:00	Continued review of exhibits and records	LSSR 202	all	n/a	
			04:30	02:30	Exhibition and Reception with faculty, administrators, alumni, and local practitioners	taxi to Gastown	all	as invited	
			07:00	02:00	Team-only dinner	Water Street Café - 300 Water St. www.waterstreetcafe.ca	all	n/a	
			09:00		Debriefing session	Hotel	all	n/a	
	Tuesday	March 20	AM	07:00	01:30	Team working breakfast (with the Director if required by the Chair)	Open Kitchen (on campus) Orchard Commons - 6363 Agronomy Road	all	n/a
				08:30	01:00	Review of general studies, electives, and related programs	LSSR 202	all	n/a
09:30				01:00	Observation of lecture and seminar; continued review of exhibits and records	ARCH 505 - LSSR 301 ARCH 504 - LSSR 102 ARCH 532 - LSSR TBA	all	TBA	
		PM	10:30	01:30	Continued review of exhibits and records	LSSR 202	all	n/a	
12:00			01:30	Team lunch with student representatives (catered)	LSSR 301	all	Approximately 8 students from the student society ARCHUS		
01:30			01:00	Observation of studios	Vertical Studios Comprehensive Studio	all	TBA		
			02:30	01:00	Meeting with SALA Staff	LSSR 301	all	Hanne Bartlett, Tara Deans, Graham Entwistle, Emma Fennell, Theresa Juba, Jaynus O'Donnell, Tracy Satterfield, Nick Scott, Gladys Tsui, Amy Villabianca	
			03:30	03:00	Complete review of exhibits and records	LSSR 202	all	n/a	
			06:30	01:00	Team-only dinner (catered)	LSSR 202	all	n/a	
			07:30		Accreditation deliberations and drafting the VTR	LSSR 202	all	n/a	
Wednesday		March 21	AM	06:45	00:15	Check out of Hotel		all	
	07:15			01:30	Team breakfast with the Program Chair and and Director and Dean James Olson, where VTR results are presented	KAISER 5004	all	John Bass Ron Kellett James Olson (7:15 to 7:45 only)	
	09:00			01:00	Exit meeting President, Provost, Dean of Graduate Studies, Assoc. VP Academic Affairs	Provost Office Boardroom WALTER C. KOERNER LIBRARY 1958 MAIN MALL	all	UBC Vice-Provost and Associate Vice- President, Academic Affairs Dr. Eric Eich	
	10:00			01:00	Teamwork/adjustments on VTR (following exit meetings)	LSSR 202	all	n/a	
	11:00				Visiting Team members depart from Vancouver airport				

Appendix D: SALA facilities update

SALA facilities update

Provided by R Kellett to MArch Accreditation Team 180320

THE PROJECT

Recently appointed (1 March 2018) Dean Olson has initiated a major expansion and consolidation project for Applied Science. This project, working title: Hub for Human-Centred Design in the Built Environment, at the heart of UBC on a prominent Main Mall site in the Applied Science precinct, would be designed for to accommodate and express a creative hybrid of Applied Science disciplines, interdisciplinarity and integrative thinking.

This program would accommodate expanded homes for the three Point Grey campus 'Schools' of Applied Science. The largest is SALA, the School of Architecture and Landscape Architecture. Others are SCARP, the School of Community and Regional Planning; the School of Nursing and compatible components of new and expanded interdisciplinary Engineering programs. This program would include over 30,000 sm of academic space of which the SALA program would represent approximately 6,000 sm. Within would be state-of-the-art Applied Science maker spaces and a prominent, actively programmed and porous public realm supportive of openness and collaboration in teaching, research and engagement with our professions and the community.

TIMELINE

This program anticipates a \$200M project of approximately 5 years duration. The first 2 ½ years would be allocated to programming, design, funding development and approvals (milestones summarized below). The second 2 ½ years would be allocated to construction and commissioning.

Milestones (some processes may overlap):

SPACE ALLOCATION AND PROJECT COMPLIANCE UNDERWAY

Development and review of program and compliance with University Strategic Plan, Academic Plan, Campus Plan, Capital Priorities and Provincial priorities

EXECUTIVE 1 APPROVAL: 2018

Project concept and rationale

EXECUTIVE 2 APPROVAL: 2019

Campus consultation; Site selection; Sustainability opportunities; Master program; Initial cost estimate; Funding and financing requirements; Schedule; Space allocation compliance

EXECUTIVE 3 APPROVAL: 2019

Preliminary function program; Urban design context; Preliminary capital and operating budgets; Funding sources; Financing requirements; Preliminary Schedule. This phase includes Architect Selection.

BOARD 1 APPROVAL: 2019

Project in principle; Site and consultants selection; Preliminary capital and operating budgets; Preliminary program; Preliminary schedule; Permission to proceed to Schematic Design; Funding release for next stage.

BOARD 2 APPROVAL: 2020

Capital and operating budgets; Program; Schedule; Authorizations to issue Development Permit, proceed to working drawing and tender; Funding release for next stage

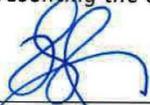
BOARD 3 APPROVAL: 2021

Final capital and operating budgets, program, schedule; Award of contract(s) for construction; Final funding release

V. Report Signatures



Myriam Blais, Team Chair
representing the educators



Katherine Wagner
representing the educators



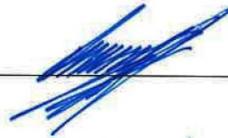
Brent Stewart
representing the practitioners



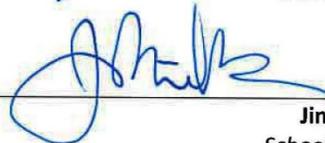
Richard De la Riva
representing the practitioners



Lindsay Andreas
representing the interns



Vincent Hui
CACB observer



Jim Nicholls
School observer



Luke Andritsos
CACB observer



University of British Columbia Response to the VTR



a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

School of Architecture and Landscape Architecture
402 - 6333 Memorial Road
Vancouver, BC Canada V6T 1Z2

Phone 604 827 7252
Fax 604 822 3808
www.sala.ubc.ca

21 April 2018

To: The 2018 CACB Visiting Team for the UBC Architecture Program
Myriam Blais, Chair
Katherine Wagner, Brent Stewart, Richard De la Riva, Lindsay Andreas, Vincent Hui, Jim Nicholls,
Luke Andritsos, Team members

From: John Bass, UBC Architecture Program Chair

To the Visiting Team,

We have received the draft Visiting Team Report, welcome its findings, and appreciate the opportunity to respond. After review and some reflection among the group, we are writing to ask that you consider amending one of the SPCs deemed by your committee to be unmet by the program. The SPC in question is A6 Human Behavior. SPC A6 requires an *understanding* – “the assimilation and comprehension of information without necessarily being able to see its full implication” – on the part of our students.

We ask you to consider this due to an omission on our part. We believe that had we indicated in the graphic matrix evidence from another course - ARCH 521 Comprehensive Design Studio - then the Team may have come to a different conclusion on A6.

In order to keep this document as short as possible, as part of this letter we are supporting our request with excerpts from several specific Comprehensive Studio assignments that some of your team will have reviewed for other SPC compliance in your assessment of our program. We've also included PDFs of the three assignments but have not attached from the student work presented last month during our visit. Instead we rely on your recollection of the Comprehensive Studio work. However, if so requested, we'd be more than happy to forward via Dropbox or other online file sharing service the Comprehensive Studio student work assembled for your visit.

We appreciate in advance your consideration and the additional time we ask of you. We make this appeal to the Visiting Team only after carefully considering your assessments, including a distillation of our internal reflections on what we presented to you, and the sincere belief that in this one instance, when seen with the additional student work done in the Comprehensive Studio, there is evidence that the program is in compliance with this SPC.

Response to VTR concerns re: A6 Human Behavior

CACB SPC A6 Definition:

Understanding of the relationship between human behavior, the natural environment and the design of the built environment.

Team Assessment:

Although part of this criterion is addressed in some of the vertical studio sections and in ARCH 513 Environmental Systems & Controls I, the focus on human behavior is not consistently met by all students.



Program Response:

In retrospect, we believe that key evidence demonstrating compliance with this SPC was omitted from inclusion in our SPC matrix. We should have included for your consideration a key element of the core curriculum: ARCH 521 Comprehensive Design Studio.

We believe that when added to the courses already examined with respect to A6 compliance the Comprehensive Design Studio's explicit contributions are sufficient to meet the "understanding" threshold for A6 Human Behavior. We include brief excerpted summaries of three weeklong assignments given as part of the 2017 Comprehensive Studio. These assignments provide additional evidence that A6 Human Behavior was an integral aspect of the learning objectives of the studio, and that the range of high and low achieving work reviewed by the Team supports our view that we are in compliance with this SPC.

ARCH 521 Comprehensive Design Studio – excerpts pertinent to A6 Human Behavior

Through a series of weeklong exercises – specifically, Exercises One, Two and Four, excerpted below -- students are introduced to programmatic (the body's needs), environmental (site and natural phenomena), and physical design (envelope and material) that are at the core of the Human Behavior SPC.

The following excerpts are taken directly from those exercises. The exercises iteratively contribute to the foundation and development of each student team's design project.

1. **Assignment One: Water, Land, Air: The Collective Spaces of Travel.** Students will generate an illustrative section cut through body and architectural environment. As one way of considering the culture of the transportation facility as proposed, it may be useful to consider the multiple activities that are to be incorporated. It is a place where people will wait for vehicles. It is a place where people will board and disembark vehicles. It is a place where people will sleep. It is a place where people will eat. It is a place where people will socialize. It is a place where people will engage the landscape. It is a place where vehicles will land and dock, and be maintained and stored.
2. **Assignment Two: Paths and Trajectories, Systems and Logistics.** In this second drawing the occupants (human and non-human) and vehicle (seaplane) are drawn again – and likely amplified – with the inclusion now of at least three distinct spaces that deal with the technical provision of systems and logistics. These three spaces must each deal with the following general categories (the bullet points illustrate aspects of these categories that you may want to investigate, but in no way are you limited to what is listed):
 1. Environmental
 - Air and its movement
 - Water and its movement
 - Natural light and its dynamic qualities
 - Non-human beings and their movement



2. Vehicular
 - Planes and their movement
 - Fuel and its provision
 - Automobile movement (cars, buses, trucks, etc.)
 - Bicycles
 - Tools and supplies associated with planes
 3. Human
 - How people move from waiting room to the plane
 - How luggage is moved through the facility
 - How people move from automobile and/or other modes such as buses, bikes to waiting room
 - How recreational users, such as cyclists and joggers, and kayakers move through the site
 - Spaces of rest
 - Spaces of pleasure
 - Spaces of celebration
3. **Assignment Four: THE WELL-TEMPERED ENVIRONMENT.** In the studio's current phase of iterative explorations, the current assignment looks to a concern for modulated - or tempered - environments as its focus of enquiry. While architectural discourse habitually privileges vision over all other senses, the mitigation of temperature and humidity – at heart the provision of shelter – is in fact the primary role of the impulse to build. While this consideration draws attention to both passive and active responses to environmental variables, it also begins the process of attending to the importance of material selection and deployment. Just as the desire for or against natural daylight leads directly to architectural decisions in the refinement of enclosure, the delineation of environmental qualities invites a refinement of material resolution.

Conclusion

Again, on behalf of my colleagues in the architecture program at UBC, we are mindful of the hard work you have already done on our behalf and appreciate the constructive and considered recommendations you've already made. Thank you for considering this request.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Bass', written in a cursive style.

John Bass
Associate Professor and Chair, Architecture Program
UBC School of Architecture and Landscape Architecture

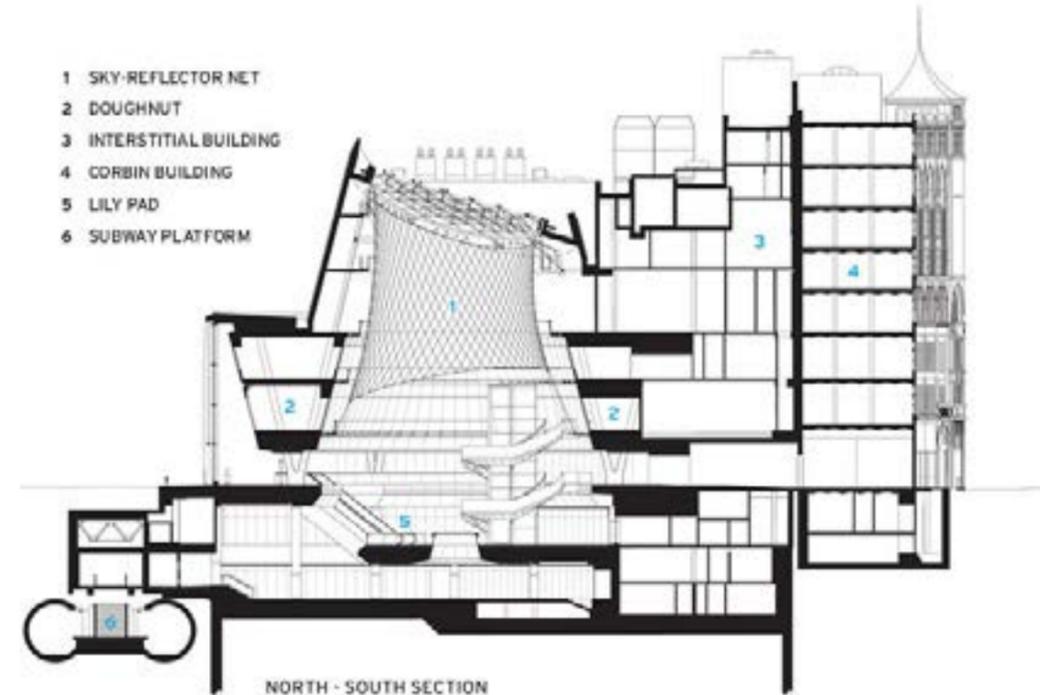
ARCH 521

Comprehensive Design Studio

Exercise #1: Handout

Assignment One: Water, Land, Air: The Collective Spaces of Travel

Assignment Issued: Tuesday January 3
Assignment Due: Thursday January 12



Nicholas Grimshaw, Fulton Center, Manhattan, New York City

It all begins with a cut: productively discrete while operatively synthetic

Students will establish teams of two and in this first exercise will generate an illustrative section cut through body and architectural environment. The drawing will demonstrate how the function and apparatus of the contemporary transportation centre can be orchestrated to produce transcendent architectural effects.

The drawing has a few givens...

The first of these are the occupants – both the human participants in the floatplane facility as well as a self-selected non-human life form – fish, birds, or mammals. The second given is that there must be a floatplane in the drawing – and this plane must be architectural engaged. In other words, the drawing must show how/where the plane docks, lands, is repaired, stored, taxis, etc. The relationship between human and non-human user groups with the spatial presence of planes should serve as a kind of cipher for the culture of the facility as you begin to probe its potential as a measure of the emerging speculation about programmatic space, light, movement, and collective spatial experience.

The third given is that the drawing represent water, land, and air. However, for the purposes of this first drawing, you are asked to disregard the specificities of the site, instead focusing intensely on the space itself and its inhabitation.

As one way of considering the culture of the transportation facility as proposed, it may be useful to consider the multiple activities that are to be incorporated. It is a place where people will wait for vehicles. It is a place where people will board and disembark vehicles. It is a place where people will sleep. It is a place where people will eat. It is a place where people will socialize. It is a place where people will engage the landscape. It is a place where vehicles will land and dock, and be maintained and stored. How can you represent the spatial interaction between some of these activities (or others that you invent) that captures a specific idea about the shared social experience of being within this facility? How can architectural invention through locating, sizing, and shaping floors, openings, and surfaces facilitate a powerful, conceptually specific, experience?

A rich series of sensory experiences certainly seems like somewhere to start...

Each team of two will construct and present a single drawing.

Each team's drawing will be constructed on a single A1 size sheet in landscape orientation.

You are encouraged to use the entire space of the sheet.

Composition and organization of your drawing are crucial to framing your concept.

Your drawing is not simply a record of architectural elements and their effects, but a generator of ideas and a place of invention...

For at least the first cycle of assignments, the three sections of the studio will pin-up together in Lasserre 202, working on the assumption that exposure to as many approaches as possible will contribute to a fertile process of investigation. Just as you will be engaged with sorting out the hunches and instincts of your partners, the three studio mentors have distinct voices to contribute to the discussion.

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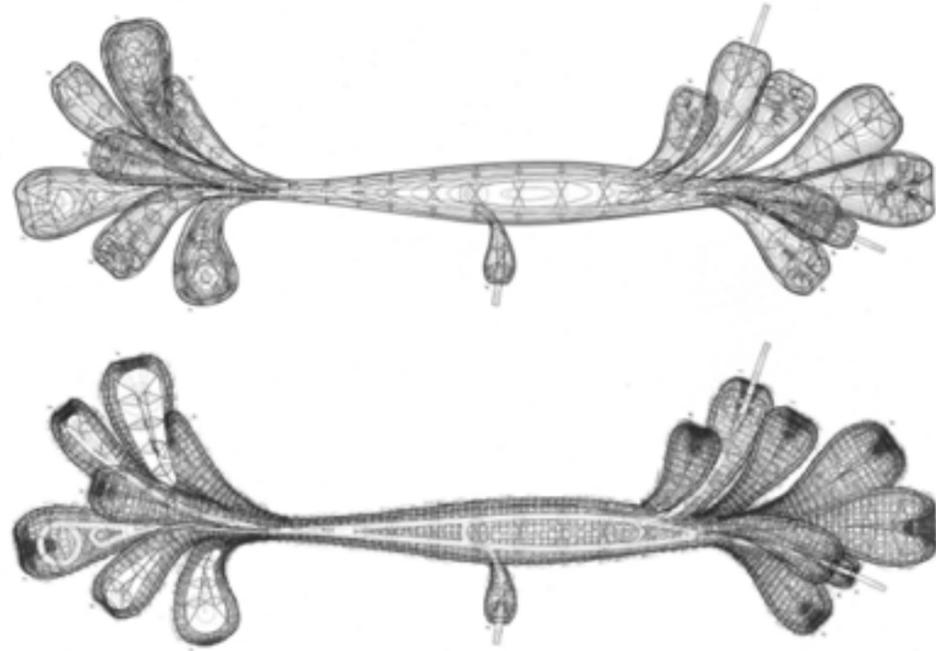
ARCH 521

Comprehensive Design Studio

Exercise #2: Handout

Assignment Two: Paths and Trajectories, Systems and Logistics

Assignment Issued: Friday 13 January
Assignment Due: Thursday 19 January, LSSR202



Amid Ceroo9, We as a Plague

The Iterative Cycle

The first assignment has generated a diverse spectrum of concepts and ideas that are now to be understood as a collective body of work and a studio-wide resource. As such, you may continue with your conceptual beginnings from Assignment One or you may borrow from the collective. Assignment Two builds upon Assignment One by asking you to now create a new section drawing in which you evaluate, revise, adapt or change your ideas based upon new considerations and findings.

In addition to the inherent task of reconsidering your ideas as represented in Assignment One, you are asked to consider how the deliberate consideration of paths and trajectories and systems and logistics, can satisfy 'functional' demands while at the same time enhancing your conceptual and experiential architectural agenda.

In this second drawing the occupants (human and non-human) and vehicle (seaplane) are drawn again – and likely amplified – with the inclusion now of at least three distinct spaces that deal with the technical provision of systems and logistics. You should consider how these three spaces function on their own terms but also relate to each other in which the sum is greater than the parts. These three

spaces must each deal with the following general categories (the bullet points illustrate aspects of these categories that you may want to investigate, but in no way are you limited to what is listed):

1. Environmental

- Air and its movement
- Water and its movement
- Natural light and its dynamic qualities
- Non-human beings and their movement

2. Vehicular

- Planes and their movement
- Fuel and its provision
- Automobile movement (cars, buses, trucks, etc.)
- Bicycles
- Tools and supplies associated with planes

3. Human

- How people move from waiting room to the plane
- How luggage is moved through the facility
- How people move from automobile and/or other modes such as buses, bikes to waiting room
- How recreational users, such as cyclists and joggers, and kayakers move through the site
- Spaces of rest
- Spaces of pleasure
- Spaces of celebration

Task

Since this exercise iteratively builds upon the first, it is expected that this new drawing represent both your spatial ideas concerning larger cultural ideas of the air transportation facility in addition to circulation and logistic issues. Many of these logistical issues require clarity of dimension (ie. Turning radius of a car, scale of a plane and its ease of movement, variations in 'drift' for a moored plane, etc.) You are now asked to employ technical considerations regarding systems and logistics as conceptually rich domains that enable enhanced architectural experience. Your work should seek a conceptual and technical alignment between circulation and logistics in the pursuit of a compelling architectural agenda.

Rules of the Game

Each team of two will construct and present a single drawing.

Each team's drawing will be constructed on a single A1 size sheet – landscape format.

Composition and organization of your drawing will be as important as the content it contains.

Your drawing is not simply a record of architectural elements and their effects. It will be constructed as a generator of ideas and a place of invention.

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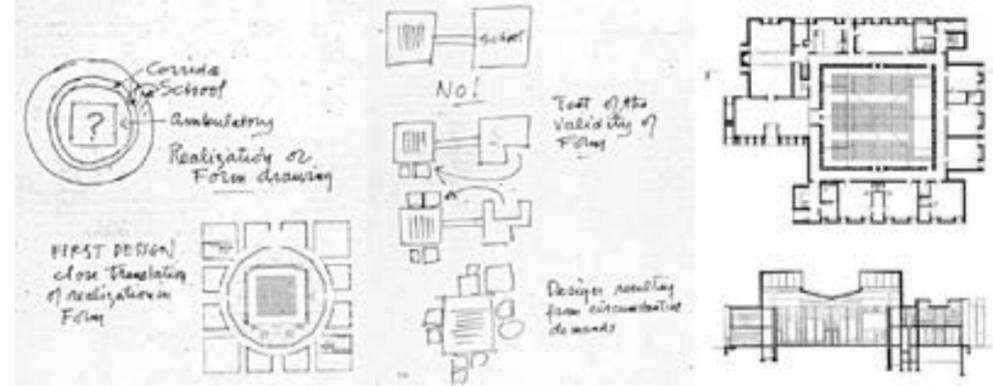
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Comprehensive Design Studio

Exercise #4: Handout

Assignment Four: THE WELL-TEMPERED ENVIRONMENT

Assignment Issued: Friday 27 January
Assignment Due: Thursday 2 February, LSSR202



Louis Kahn, Unitarian Church, Rochester NY...from diagram to architectural proposal...

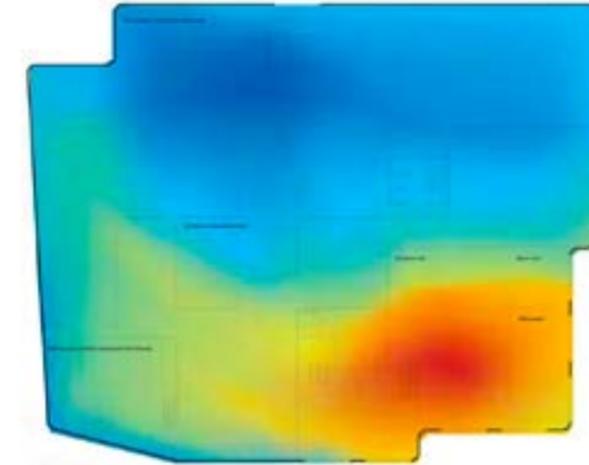
The well-tempered environment

In the studio's current phase of iterative explorations, the current assignment looks to a concern for modulated - or tempered – environments as its focus of enquiry. While architectural discourse habitually privileges vision over all other senses, the mitigation of temperature and humidity – at heart the provision of shelter – is in fact the primary role of the impulse to build. While this consideration draws attention to both passive and active responses to environmental variables, it also begins the process of attending to the importance of material selection and deployment. Just as the desire for or against natural daylight leads directly to architectural decisions in the refinement of enclosure, the delineation of environmental qualities invites a refinement of material resolution.

In particular, the programmes of the **terminal, restaurant, hangar, hotel and spa** provides a clear delineation of a spectrum of environmental conditions in which the natural environment is controlled. At one end of the spectrum your project may simply provide cover from rain or sun: at the other it might necessarily protect people, equipment, and machines from variations in temperature, UV light, kinds of air-flow and offer consistent degrees of temperature and humidity. The array of intervals along this spectrum is yours to imagine...

In the sequence of exercises that support the studio work this is also the time to begin the important transformation from diagrammatic intent to architectural proposal. The orchestration of programme, shapes of spaces, paths, trajectories, systems, logistics and atmosphere begins to have more clearly defined geography as functional and spatial aspirations are amplified through the agency of environmental control.

RADIATION
CONDUCTION
CONVECTION
PRESSURE
EVAPORATION
DIGESTION



Convective Museum, Phillipe Rham Architects... 'Space as thermodynamic tension: If usually the form of a building and his program are given in terms of area and volume, we would like to propose an architecture as meteorology and atmosphere...'

Exercise Requirements

Notwithstanding that various – and perhaps many – aspects of the project organization remain unknown, this exercise requires that a comprehensive set of orthographic drawings outline the emerging architectural project.

These will include:

- . 1:1000 site plan describing orientation and immediate context
- . 1:200 plans at all levels of your proposal
- . not less than three 1:200 building sections

These base drawings will then be overlaid with 2D and 3D diagrams that describe the array of distinct modulations of environmental control, together with:

- . assignment of locations and sizes for equipment necessary to enact the environmental control
- . mapping of distribution

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