

**Northeastern University
School of Architecture**

Visiting Team Report

Master of Architecture

The National Architectural Accrediting Board
29 March 2006

The National Architectural Accrediting Board (NAAB), established in 1940, is the sole agency authorized to accredit U.S. professional degree programs in architecture. Because most state registration boards in the United States require any applicant for licensure to have graduated from an NAAB-accredited program, obtaining such a degree is an essential aspect of preparing for the professional practice of architecture.

Table of Contents

<u>Section</u>	<u>Page</u>
I. Summary of Team Findings	
1. Team Comments	
2. Progress Since the Previous Site Visit	
3. Conditions Well Met	
4. Conditions Not Met	
5. Causes of Concern	
II. Compliance with the Conditions for Accreditation	
III. Appendices:	
A. Program Information	
1. History and Description of the Institution	
2. Institutional Mission	
3. Program History	
4. Program Mission	
5. Program Strategic Plan	
B. The Visit Agenda	
C. The Visiting Team	
IV. Report Signatures	

I. Summary of Team Findings

1. Team Comments

The **visiting** team finds the program in Architecture at Northeastern University to be healthy, and vibrant. The University's development of the Ruggles MBTA studio recognizes the Programs success and signals a commitment to the program and its aspirations. In particular, the program's well-conceived and compelling mission, focused on the immediate urban condition provides critical intersections with the University's broader educational mission. **This** mission contributes to Boston's needs, resonates with allied disciplines, and has had demonstrable effect on students' awareness and community contributions to the educational program.

The program has many demonstrable strengths. Key among them is a dedicated, innovative and enthusiastic faculty. The team commends the faculty for its hard work and creative engagement with the program's mission. The faculty integrates aesthetic, technical, cultural and historical content into a well-conceived curriculum. Through its efforts the faculty has created a vibrant intellectual community in which the careers of young architects are stewarded.

Of equal Importance to the development of this intellectual community is an inquisitive and creative student body, whose work demonstrates their commitment to **the** discipline of **architecture**. The students are engaged and thoughtful. They **are** at ease with the schedule of studies and their co-op experience. They have easy access to the program's administration, and they appreciate the resources and opportunities put before them.

The students and faculty are ably led by program Chair, George Thrush. The Chair is seemingly tireless in his enthusiasm for the program and has crafted in collaboration with his colleagues not only a clear **but** well-articulated mission for the program. The Chair has provided the leadership which has enabled the program to set and attain its initial ambitious goals. His intellectual leadership is to be commended.

The Program has made progress in developing research initiatives to support its mission, both in the complex urban reclamation sites of Boston's perimeter, and in the critical housing needs of the populace. In particular the collaboration with the newly formed Center for Urban and Regional Policy points to productive synergy with other research units on campus. We hope that the University takes note of this collaboration and offers it continued support for this and other similar endeavors.

The Co-op Program continues to provide a distinctive opportunity for an active relationship between education and practice, for both the student and the hiring practitioners. Co-op is well positioned to influence the achievements of upper-level studies. However, the **co-op** experience should be more actively examined in the classroom, since the team saw little physical evidence of the experience obtained **integrated** into a student's subsequent studies. The team is confident that this formal relationship can be better executed, especially with recent improvements to **co-op** mechanics and with the growing network of professionals engaged in the project, **and** by further engaging the academic faculty in the program **integration**

2. Progress Since the Previous Site Visit

Criterion 12.14 Accessibility

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

Previous Team Report: The Team did not find evidence of work to demonstrate that this Criterion is met. Moreover, the Program would benefit from specific address of the issues related to accessibility within the curriculum.

This criterion is now met.

Criterion 12.22 Building Systems Integration

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

Previous Team Report: The Integrated Building Systems course is a very key component of the Department's curriculum, however, the ability to select and integrate structural, environmental, life-safety and building envelope systems into a single, rational building design was not evident in the student work.

This criterion is met, with concern. See discussion in criterion 13.23.

Criterion 12.27 Detailed Design Development

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

Previous Team Report: There is not enough evidence in the documentation of coursework or co-op experience to demonstrate compliance with this criterion.

Evidence of student ability in this area developed through Co-op must be adequately documented. Even though Co-op is understood to be an important strength of this program, there is no guarantee that it is a common experience for each student. It is the responsibility of the Northeastern Department of Architecture to oversee the content of each student's Co-op Experience, collect documentation of the work completed by the students during Co-op, and provide formal instruction in this Criterion in the event it is not covered during Co-op, if Co-op is to be used to meet NAAB Criteria.

This criterion no longer exists, please reference comments in student performance criterion 13.28.

Criterion 12.28 Technical Documentation

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

Previous Team Report: There is not enough evidence in the documentation of coursework or co-op experience to demonstrate compliance with this criterion.

Evidence of student ability in this area developed through co-op must be adequately documented. Even though co-op is understood to be an important strength of this program, there is no guarantee that it is a common experience for each student. It is the responsibility of the Northeastern Department of Architecture to oversee the content of each student's co-op experience, collect documentation of the work completed by the students during co-op, and

provide formal instruction in this criterion in the event it is not covered during co-op, if co-op is to be used to meet NAAB Criteria.

This criterion is met, with continuing concern. See discussion in criterion 13.26.

Criterion 12.29 Comprehensive Design

Ability to produce an architecture project informed by a comprehensive program, from schematic design through the detailed development of programmatic spaces, structural and environmental systems, life-safety provisions, wall sections, and building assemblies, as may be appropriate; and to assess the completed project with respect to the program's design criteria

Previous Team Report: The Team did not see work articulated fully enough to satisfy the expected level of development. Work should more clearly show the relationship between the building program and the resultant design, and the tectonic qualities of the resultant building. Each phase of the design process as outlined in the NAAB Criteria needs to be fully articulated.

This criterion is not met. See discussion in 13.28.

Criterion 12.30 Program Preparation

Ability to assemble a comprehensive program for an architecture project, including an assessment of client and user needs, a critical review of appropriate precedents, an inventory of space and equipment requirements, an analysis of site conditions, a review of the relevant laws and standards and an assessment of their implications for the project, and a definition of site selection and design assessment criteria

Previous Team Report: The Team did not find evidence of work to demonstrate that this Criterion is met. There existed evidence that students possessed a rudimentary skill of programming at the urban level. However, there was no evidence to indicate that this Criterion is met in other areas of coursework throughout the curriculum.

This criterion is now met.

3. Conditions Well Met

- 3.1.1 Architectural Education and the Academic Context**
- 3.1.5 Architectural Education and Society**
- 3.8 Physical Resources**
- 3.13.24 Building Materials and Assemblies**

4. Conditions Not Met

3.6 Human Resources
3.13.28 Comprehensive Design

5. Causes of Concern

- The team notes continued concern about the number of full time faculty, and whether there is enough such faculty to adequately advise and mentor students and coordinate adjunct faculty.
- While the co-op experience is an important part of the school's program and mission, the team has a continuing concern that there is limited evidence of the integration of the co-op experience into the academic experience. The team understands the program no longer relies on the co-op to solely fulfill the NAAB requirements, but feels that the program lacks sufficient full-time faculty advisors to help students integrate the skills acquired during co-op.
- The team recognizes the value of the case-study approach to teaching professional practice, however, there are continuing concerns that the criteria surrounding aspects of professional practice be more evident in student work.
- There is a continuing challenge to maintain the school's ambition and mission with a faculty in which there is a large number of adjuncts.
- With the additional number of course hours available as a result of eliminating one co-op term, there is a concern that there are adequate elective courses available to allow students to pursue individual academic interests.
- The school's lack of diversity amongst its faculty and students is an ongoing concern.

II. Compliance with the Conditions for Accreditation

1. Program Response to the NAAB Perspectives

Schools must respond to the interests of the collateral organizations that make up the NAAB as set forth by this edition of the NAAB Conditions for Accreditation. Each school is expected to address these interests consistent with its scholastic identity and mission.

1.1 Architecture Education and the Academic Context

The accredited degree program must demonstrate that it benefits from and contributes to its institution. In the APR, the accredited degree program may explain its academic and professional standards for faculty and students; its interaction with other programs in the institution; the contribution of the students, faculty, and administrators to the governance and the intellectual and social lives of the institution; and the contribution of the institution to the accredited degree program in terms of intellectual resources and personnel.

Met	Not Met
[X]	[]

Well met: There is continuing evidence of a positive connection between the University and the School of Architecture. The chair and faculty are well respected and are actively engaged in the larger mission of the University.

1.2 Architecture Education and Students

The accredited degree program must demonstrate that it provides support and encouragement for students to assume leadership roles in school and later in the profession and that it provides an environment that embraces cultural differences. Given the program's mission, the APR may explain how students participate in setting their individual and collective learning agendas; how they are encouraged to cooperate with, assist, share decision making with, and respect students who may be different from themselves; their access to the information needed to shape their future; their exposure to the national and international context of practice and the work of the allied design disciplines; and how students' diversity, distinctiveness, self-worth, and dignity are nurtured.

Met	Not Met
[X]	[]

The school offers an environment for students to be involved in leadership and community service as most recently exemplified by AIAS participation with Freedom by Design. The team notes the growing influence of and interest in the school's AIAS chapter due to its strong leadership.

1.3 Architecture Education and Registration

The accredited degree program must demonstrate that it provides students with a sound preparation for the transition to internship and licensure. The school may choose to explain in the APR the accredited degree program's relationship with the state registration boards, the exposure of students to internship requirements including knowledge of the national Intern Development Program (IDP) and continuing education beyond graduation, the students' understanding of their responsibility for professional conduct, and the proportion of graduates who have sought and achieved licensure since the previous visit.

Met	Not Met
[X]	[]

As a part of the school's ongoing self-assessment, the program should maintain records of the number of graduates who apply for and attain licensure.

1.4 Architecture Education and the Profession

The accredited degree program must demonstrate how it prepares students to practice and assume new roles and responsibilities in a context of increasing cultural diversity, changing client and regulatory demands, and an expanding knowledge base. Given the program's particular mission, the APR may include an explanation of how the accredited degree program is engaged with the professional community in the life of the school; how students gain an awareness of the need to advance their knowledge of architecture through a lifetime of practice and research; how they develop an appreciation of the diverse and collaborative roles assumed by architects in practice; how they develop an understanding of and respect for the roles and responsibilities of the associated disciplines; how they learn to reconcile the conflicts between architects' obligations to their clients and the public and the demands of the creative enterprise; and how students acquire the ethics for upholding the integrity of the profession.

Met	Not Met
[X]	[]

The students' engagement with the profession is enhanced by the co-op program at Northeastern University and by the presence of faculty from a variety of local firms.

1.5 Architecture Education and Society

The program must demonstrate that it equips students with an informed understanding of social and environmental problems and develops their capacity to address these problems with sound architecture and urban design decisions. In the APR, the accredited degree program may cover such issues as how students gain an understanding of architecture as a social art, including the complex processes carried out by the multiple stakeholders who shape built environments; the emphasis given to generating the knowledge that can mitigate social and environmental problems; how students gain an understanding of the ethical implications of decisions involving the built environment; and how a climate of civic engagement is nurtured, including a commitment to professional and public services.

Met	Not Met
[X]	[]

Well met: The program has established a diverse set of connections within the University and in the Boston community. These include a significant role in the University's Center for Urban and Regional Policy. Many of the faculty have developed project studies that engage students and community leaders in effective civic dialogue.

2. Program Self-Assessment Procedures

The accredited degree program must show how it is making progress in achieving the NAAB Perspectives and how it assesses the extent to which it is fulfilling its mission. The assessment procedures must include solicitation of the faculty's, students', and graduates' views on the program's curriculum and learning. Individual course evaluations are not sufficient to provide insight into the program's focus and pedagogy.

Met	Not Met
[X]	[]

3. Public Information

To ensure an understanding of the accredited professional degree by the public, all schools offering an accredited degree program or any candidacy program must include in their catalogs and promotional media the exact language found in the NAAB Conditions for Accreditation, Appendix A. To ensure an understanding of the body of knowledge and skills that constitute a professional education in architecture, the school must inform faculty and incoming students of how to access the NAAB Conditions for Accreditation.

Met	Not Met
[X]	[]

4. Social Equity

The accredited degree program must provide faculty, students, and staff—irrespective of race, ethnicity, creed, national origin, gender, age, physical ability, or sexual orientation—with an educational environment in which each person is equitably able to learn, teach, and work. The school must have a clear policy on diversity that is communicated to current and prospective faculty, students, and staff and that is reflected in the distribution of the program's human, physical, and financial resources. Faculty, staff, and students must also have equitable opportunities to participate in program governance.

Met	Not Met
[X]	[]

The team concurs with the Chairman's report in the APR which identifies the program's continuing challenges in constructing a diverse body of students and faculty.

5. Studio Culture

The school is expected to demonstrate a positive and respectful learning environment through the encouragement of the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff. The school should encourage students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers.

Met Not Met
[X] []

There seems to be a healthy studio culture yet there has not been a collaborative effort by the administration and students to produce a written studio policy. Given the number of part-time faculty, a written policy will be critical to maintain a productive environment. This criterion is met contingent upon the formulation of such a document.

6. Human Resources

The accredited degree program must demonstrate that it provides adequate human resources for a professional degree program in architecture, including a sufficient faculty complement, an administrative head with enough time for effective administration, and adequate administrative, technical, and faculty support staff. Student enrollment in and scheduling of design studios must ensure adequate time for an effective tutorial exchange between the teacher and the student. The total teaching load should allow faculty members adequate time to pursue research, scholarship, and practice to enhance their professional development.

Met Not Met
[] [X]

At the time of the 2002 visiting team report, the faculty compliment met “only the bare necessities”. Since the 2002 visit, the student body has nearly doubled as have the pressures on the existing faculty to deliver the content of the curriculum with sustained rigor. The increased demand for faculty has been met almost exclusively with adjunct faculty. While the adjuncts are dedicated, skilled and talented they have a limited connection to the school and students. Many of the team’s concerns about the program’s ability to consistently deliver curricular content and meet the NAAB requirements are directly tied to the appropriate number of full-time faculty. The team believes that it is critical to obtain and maintain additional full-time faculty and full-time lines.

Additionally, while the Chair is a dynamic and innovative leader, the challenges that lie ahead for the program to grow to meet its ambitions will require the Chair’s focused attention. Currently the Chair is charged with not only running the program, but the minutia of administrative tasks. Additional administrative assistance is essential for the program to continue to grow to its full potential.

7. Human Resource Development

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

Met Not Met
[X] []

8. Physical Resources

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

related instructional support space. The facilities must also be in compliance with the Americans with Disabilities Act (ADA) and applicable building codes.

Met	Not Met
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Well met: The team recognizes the University's investment in the program through the expansion and renovation of the Ruggles MBTA studio. The opening of this new studio space provided the program with much needed room.

9. Information Resources

Readily accessible library and visual resource collections are essential for architectural study, teaching, and research. Library collections must include at least 5,000 different cataloged titles, with an appropriate mix of Library of Congress NA, Dewey 720–29, and other related call numbers to serve the needs of individual programs. There must be adequate visual resources as well. Access to other architectural collections may supplement, but not substitute for, adequate resources at the home institution. In addition to developing and managing collections, architectural librarians and visual resources professionals should provide information services that promote the research skills and critical thinking necessary for professional practice and lifelong learning.

Met	Not Met
<input checked="" type="checkbox"/>	<input type="checkbox"/>

The library exceeds the number of volumes and visual resources required for accreditation. Currently the library recognizes that its collection contains 50% of the discipline's core periodicals. Resources for the serial periodicals are controlled by the Provost's office. Every effort should be made to secure the funds necessary to allow this important part of the collection to grow.

Digital technology is an increasingly important part of architectural education and professional practice. The team recognizes a need for coordination of campus-wide resources in order to provide appropriate software to support the program.

10. Financial Resources

An accredited degree program must have access to sufficient institutional support and financial resources to meet its needs and be comparable in scope to those available to meet the needs of other professional programs within the institution.

Met	Not Met
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Met with concern: The concerns identified in the 2002 VTR remain. In particular, the team is concerned by the fact that the architecture program has the lowest budget allocation per-student amongst the professional schools with the exception of the school of journalism.

The increase in the total number of students has not been met with a proportional increase in university budget allocation, faculty lines, discretionary spending, and student aid.

11. Administrative Structure

The accredited degree program must be, or be part of, an institution accredited by one of the following regional institutional accrediting agencies for higher education: the Southern Association of Colleges and Schools (SACS); the Middle States Association of Colleges and Schools (MSACS); the New England Association of Schools and Colleges (NEASC); the North Central Association of Colleges and Schools (NCACS); the Northwest Commission on Colleges and Universities (NWCCU); and the Western Association of Schools and Colleges (WASC). The accredited degree program must have a measure of autonomy that is both comparable to that afforded other professional degree programs in the institution and sufficient to ensure conformance with the conditions for accreditation.

Met Not Met
[X] []

The team has been assured by the Provost that the program will shift from Department to School status by the end of the academic year.

12. Professional Degrees and Curriculum

The NAAB accredits the following professional degree programs: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and electives. Schools offering the degrees B. Arch., M. Arch., and/or D. Arch. are strongly encouraged to use these degree titles exclusively with NAAB-accredited professional degree programs.

Met Not Met
[X] []

The curriculum was recently adjusted and approved resulting in a total of 177 credit hours for a combined B.S. and M.Arch curricula. In addition, the program includes two mandatory 6 month cooperative experiences.

13. Student Performance Criteria

The accredited degree program must ensure that each graduate possesses the knowledge and skills defined by the criteria set out below. The knowledge and skills are the minimum for meeting the demands of an internship leading to registration for practice.

13.1 Speaking and Writing Skills

Ability to read, write, listen, and speak effectively

Met Not Met
[X] []

13.2 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] []

13.3 Graphic Skills

Ability to use appropriate representational media, including freehand drawing and computer technology, to convey essential formal elements at each stage of the programming and design process

Met	Not Met
[X]	[]

Met with concern: Examples of student work do not consistently provide evidence of high quality graphic representation appropriate to fully describe the intent. The skills and experiences gained in early representational classes are not always carried though to the upper level studios. However, the team recognizes the generally high quality of graphic representation found in most bound materials.

13.4 Research Skills

Ability to gather, assess, record, and apply relevant information in architectural coursework

Met	Not Met
[X]	[]

13.5 Formal Ordering Skills

Understanding of the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition, and urban design

Met	Not Met
[X]	[]

13.6 Fundamental Skills

Ability to use basic architectural principles in the design of buildings, interior spaces, and sites

Met	Not Met
[X]	[]

13.7 Collaborative Skills

Ability to recognize the varied talent found in interdisciplinary design project teams in professional practice and work in collaboration with other students as members of a design team

Met	Not Met
[X]	[]

13.8 Western Traditions

Understanding of the Western architectural canons and traditions in architecture, landscape and urban design, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them

Met	Not Met
[X]	[]

13.9 Non-Western Traditions

Understanding of parallel and divergent canons and traditions of architecture and urban design in the non-Western world

Met	Not Met
[X]	[]

13.10 National and Regional Traditions

Understanding of national traditions and the local regional heritage in architecture, landscape design and urban design, including the vernacular tradition

Met	Not Met
[X]	[]

13.11 Use of Precedents

Ability to incorporate relevant precedents into architecture and urban design projects

Met	Not Met
[X]	[]

13.12 Human Behavior

Understanding of the theories and methods of inquiry that seek to clarify the relationship between human behavior and the physical environment

Met	Not Met
-----	---------

[X] []

13.13 Human Diversity

Understanding of the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects

Met Not Met
[X] []

13.14 Accessibility

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

Met Not Met
[X] []

13.15 Sustainable Design

Understanding of the principles of sustainability in making architecture and urban design decisions that conserve natural and built resources, including culturally important buildings and sites, and in the creation of healthful buildings and communities

Met Not Met
[X] []

The team believes that particularly with the urban emphasis of this program, historic preservation and adaptive reuse are logical inclusions in the curriculum content.

13.16 Program Preparation

Ability to prepare a comprehensive program for an architectural project, including assessment of client and user needs, a critical review of appropriate precedents, an inventory of space and equipment requirements, an analysis of site conditions, a review of the relevant laws and standards and assessment of their implication for the project, and a definition of site selection and design assessment criteria

Met Not Met
[X] []

13.17 Site Conditions

Ability to respond to natural and built site characteristics in the development of a program and the design of a project

Met Not Met
[X] []

Met with concern: The team recognizes that the lower level studios successfully introduce students to aspects of site analysis. However, the skills introduced in the lower level studios are not developed in the work of upper-level students.

13.18 Structural Systems

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

Met	Not Met
[X]	[]

Met with concern: The team believes that the two-semester structural sequence could more accurately be described as an introductory structures class and a materials and methods class (please reference comments in 13.24). As such, understanding of how design decisions relate to structural systems performance is limited and needs to be expanded.

13.19 Environmental Systems

Understanding of the basic principles and appropriate application and performance of environmental systems, including acoustical, lighting, and climate modification systems, and energy use, integrated with the building envelope

Met	Not Met
[X]	[]

Met with concern: This criterion is met, though the team is concerned that there is insufficient time spent to fully introduce acoustical and lighting design.

13.20 Life-Safety

Understanding of the basic principles of life-safety systems with an emphasis on egress

Met	Not Met
[X]	[]

Met with concern: As noted in the previous visiting team's report, the basic principals regarding life-safety are still only minimally addressed or evidenced in student work. This includes, but is not limited to the concept of fire separation and suppression strategies.

13.21 Building Envelope Systems

Understanding of the basic principles and appropriate application and performance of building envelope materials and assemblies

Met	Not Met
[X]	[]

13.22 Building Service Systems

Understanding of the basic principles and appropriate application and performance of plumbing, electrical, vertical transportation, communication, security, and fire protection systems

Met	Not Met
[X]	[]

This criterion is met, though the team is concerned that vertical transportation, communications and security are only nominally covered.

13.23 Building Systems Integration

Ability to assess, select, and conceptually integrate structural systems, building envelope systems, environmental systems, life-safety systems, and building service systems into building design

Met	Not Met
[X]	[]

Met with concern: The team has a continuing concern that although there seems to be an understanding within the integrated systems course the student work does not display the ability to conceptually assess, select, and integrate building systems into a building design. The team recognizes the improvement since the last visit but feels that **this criterion** needs to continue to be developed.

13.24 Building Materials and Assemblies

Understanding of the basic principles and appropriate application and performance of construction materials, products, components, and assemblies, including their environmental impact and reuse

Met	Not Met
[X]	[]

Well met: The team believes that this criterion is well met largely because of the content and delivery of the Tectonics course U357. The student work demonstrates an **excellent** understanding of building materials and their assemblies. However, the Structures II nomenclature does not provide the structural content the title implies.

13.25 Construction Cost Control

Understanding of the fundamentals of building cost, life-cycle cost, and construction estimating

Met	Not Met
[X]	[]

13.26 Technical Documentation

Ability to make technically precise drawings and write outline specifications for a proposed design

Met	Not Met
-----	---------

[X] []

Met with concern: There is no evidence of an ability to write outline specifications.

13.27 Client Role in Architecture

Understanding of the responsibility of the architect to elicit, understands, and resolve the needs of the client, owner, and user

Met Not Met
[X] []

13.28 Comprehensive Design

Ability to produce a comprehensive architectural project based on a building program and site that includes development of programmed spaces demonstrating an understanding of structural and environmental systems, building envelope systems, life-safety provisions, wall sections and building assemblies and the principles of sustainability

Met Not Met
[] [X]

The team substantively concurs with the previous visiting team's comments regarding this section and believes that the successful implementation of this criterion is extremely important.

The team believes that the curriculum generally provides the basic knowledge required to meet this criterion. However, the student work does not demonstrate a synthesis of those curricular components into a comprehensive architectural project meeting NAAB requirements for this section.

13.29 Architect's Administrative Roles

Understanding of obtaining commissions and negotiating contracts, managing personnel and selecting consultants, recommending project delivery methods, and forms of service contracts

Met Not Met
[X] []

13.30 Architectural Practice

Understanding of the basic principles and legal aspects of practice organization, financial management, business planning, time and project management, risk mitigation, and mediation and arbitration as well as an understanding of trends that affect practice, such as globalization, outsourcing, project delivery, expanding practice settings, diversity, and others

Met Not Met
[X] []

13.31 Professional Development

Understanding of the role of internship in obtaining licensure and registration and the mutual rights and responsibilities of interns and employers

Met	Not Met
<input checked="" type="checkbox"/>	<input type="checkbox"/>

13.32 Leadership

Understanding of the need for architects to provide leadership in the building design and construction process and on issues of growth, development, and aesthetics in their communities

Met	Not Met
<input checked="" type="checkbox"/>	<input type="checkbox"/>

13.33 Legal Responsibilities

Understanding of the architect's responsibility as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, historic preservation laws, and accessibility laws

Met	Not Met
<input checked="" type="checkbox"/>	<input type="checkbox"/>

13.34 Ethics and Professional Judgment

Understanding of the ethical issues involved in the formation of professional judgment in architectural design and practice

Met	Not Met
<input checked="" type="checkbox"/>	<input type="checkbox"/>

III. Appendices

Appendix A: Program Information

1. History and Description of the Institution

The following text is taken from the 2005 Northeastern University Architecture Program Report:

Northeastern University was founded in 1898, as an offshoot of the Young Men's Christian Association (YMCA). It offered courses in law, and soon afterward began offering engineering and other practical trades to recent immigrants. Courses were often held in the evening, and were geared toward making the opportunities of the age available to these new arrivals. The University began as "Department of Law of the Boston YMCA".

Within ten years, the new school has begun offering other practical courses in art, architecture, navigation, surveying, mathematics, and other subjects (though architecture did not last long), and instituted a program of co-operative education (course-work interspersed with full-time work experience that continues to this day. "Co-op", as the system was called, became inextricably associated with the University. Northeastern also became known as the urban University of Boston. That focus on urban issues has continued even as the University has grown far beyond its humble roots. Under the presidency of Richard Freeland, Northeastern has become a major research University that continues its commitment to co-op, and retains an urban focus. All of this plays directly into the strong connection that exists today between the School of Architecture and the University.

Below is a timeline showing the critical phases of the University's evolution:

1898 Department of Law of the Evening Institute at the Boston YMCA founded. 1904 Department of law incorporated and chartered to grant degrees in law. 1909. Cooperative Education Engineering School began.
1916 Northeastern College of the Boston YMCA established.
1917 Frank Palmer Speare inaugurated first president.
1922 Name changed to Northeastern University of the Boston YMCA; College of Business Administration established.
1935 Name changed to Northeastern University, Corporation formed, and Board of Trustees chosen; College of Liberal Arts established.
1940 Carl Stephens Eil inaugurated second president.
1943 Women first admitted to the day colleges.
1953 College of Education established.
1959 Asa Smallidge Knowles inaugurated third president.
1960 University College established.
1962 Merger of New England College of Pharmacy with Northeastern University to form College of Pharmacy and Allied Health Professions.
1964 College of Nursing established.
1964 Merger of Tufts University's Bouve -Boston School with Northeastern University to form Boston- Bouve College. 1967 College of

Criminal Justice established; School of Law reopened. 1975 Kenneth Gilmore Ryder inaugurated fourth president. 1982 College of Computer Science established. 1986 Studio courses in Architecture begin 1989 John Anthony Curry inaugurated fifth president. 1990 Coordinated Studio Program in Architecture begins 1989 Graduate School of Nursing established. 1992 Merger of Northeastern University's Boston Bouve College of Human Development Professions with its College of Pharmacy and Allied Health Professions to form the new Bouve College of Pharmacy and Health Sciences. 1996 Richard Middleton Freeland inaugurated president. 1999 Architecture authorized to pursue professional accreditation 2000 New Ruggles Dedicated Architecture Studio Opens (NAAB Candidacy Visit) 2001 Provost Approves New Faculty Lines, Ongoing M.Arch Budgets 2002 Architecture becomes its own Distinct Academic Unit, Moves into Separate Departmental Suite, (NAAB Initial Accreditation Visit) 2005 Department of Architecture becomes The School of Architecture 2005 Major Expansion of Ruggles Studio approved, tripling existing space to accommodate program growth

2. Institutional Mission

The following text is taken from the 2005 Northeastern University Architecture Program Report:

Northeastern University's mission, as a national research university that is student-centered, practice-oriented, and urban, is to provide individuals with the opportunity for upward mobility through excellence in education. The University achieves its mission through curricula that value equally knowledge for its own sake, knowledge as a means to success in the workplace, and knowledge as a cornerstone of personal achievement and satisfaction.

Achieving Northeastern University's mission requires excellence in teaching, and teaching remains the central activity of Northeastern's faculty. By offering undergraduate and graduate programs that are rigorous, relevant, and rewarding, the University provides a solid structure for academic excellence. Northeastern University is also committed to the search for knowledge through research, and the scholarly, and artistic undertakings of its faculty and students.

A central mandate of Northeastern University is to offer students the opportunity to apply lessons of the classroom and laboratory directly to the workplace through cooperative education. For close to a century, cooperative education has been the keystone of Northeastern's uniqueness. As an increasing percentage of the nation's population enters its college-educated work force, and new technologies continue to

change the nature of work, the University is committed to ensuring that the cooperative plan keeps pace with those changes.

Northeastern University is also committed to serving the educational needs of a pluralistic student population in an amenable physical environment. The University believes that its mission can be achieved only if the student body is not limited by economic status, cultural or racial background, geographic origin, gender, age, or sexual orientation. Northeastern has a long history of serving the educational needs of the non-traditional student, providing degree and non-degree programs for people whose circumstances prevent them from following the standard college regimen.

Beyond the confines of the campus, Northeastern University is determined to maintain and strengthen its reputation as a friend to the City of Boston and a partner to the Commonwealth of Massachusetts. The University's obligation to serve the community, of which it is an integral part, is fulfilled primarily through the educational enterprise. Through its numerous outreach programs, the University has made striking contributions to the community in applied research, high technology, and the arts. Northeastern University continues to contribute in these and other ways to the region's overall quality of life and to its economic vitality.

3. Program History

The following text is taken from the 2005 Northeastern University Architecture Program Report:

Northeastern's Architecture program began in earnest with the creation of the position of Head of Architecture in 1990. The program, which had - begun with some satellite operations a few years earlier, was focused under one roof as a Concentration within the Department of Art and Architecture.

The central campus library increased their collecting of architecture books and journals, and the curator of the department's slide collection stepped up development in the architecture area. In the later 1990s, after Northeastern's financial health improved following a downturn earlier in the decade, the University was able to build a new media-equipped classroom building, hire another tenure-track architect, replace a retiring Chair with another architectural historian, and continue to build architectural video, book, and journal collections in the library.

In the fall of 1999, the College of Arts and Sciences at Northeastern recognized the architecture program's success by granting it the status of an official Major in the College. At the same time, the President, Provost, and Dean of the College requested that the Architecture faculty prepare for national, professional accreditation. The University renovated space in the local transit station for dedicated architecture studios in 2000.

The first NAAB visit, the so-called "Candidacy" visit, occurred in the fall of 2000. The Visiting Team was impressed with the mission and direction of the Northeastern program and so the NAAB board granted the program Candidacy Status following its next meeting, in December 2000.

Following that visit, and in response to one of its primary recommendations, the Department of Architecture separated from the former Department of Art and Architecture, to become a distinct, self-contained academic unit. George Thrush was named Chair of the new Department of Architecture, which moved into new, separate office space July, 2002. That same year saw the hiring of two additional tenure-track

faculty members, and a re-vamping of the curriculum for semester conversion (from the quarter system). The Department of Architecture received its letter of Initial Accreditation for a six-year, B.S. plus M.Arch. degree in January, 2003.

Since that visit, the Department of Architecture has become a School of Architecture, and seen its enrollments grow to a steady incoming class size of 60-80 students per year. January, 2006 will see the opening of a new expanded architecture studio to serve these additional students.

A successful co-op program, urban focus, lecture series, and public outreach have propelled the School of Architecture into prominence in the regional architecture scene.

4. Program Mission

The following text is taken from the 2005 Northeastern University Architecture Program Report:

Architecture is the context for civic life. The built environment remains the physical framework society has no choice but to share. In an age of increasingly rapid technological and social change, architects must find ways to forge civic connections between our past and our future. Such a task involves critical thinking about many complex contemporary issues, such as the relationship of public and private life, the interaction between architecture and the political and economic structure of cities, and the role of technology in contemporary architecture and design thinking.

The challenge facing American Architecture at the moment is to develop models that resist the ongoing fragmentation and decentralization of our urban areas. Since the Second World War, a series of forces from federal highway policy to Urban Renewal contributed to the "suburban sprawl" that has stripped many cities of their vital centers. In addition, serious architectural work has continued to migrate away from the "everyday" concerns of housing and commercial buildings to one-of-a-kind cultural and institutional buildings. The School of Architecture at Northeastern seeks to address the planning and urban design problems of this post-industrial era, and also to create new models and types that will allow the re-introduction of critical architectural thinking in the realm of the for-profit real estate venture (that accounts for most of the American landscape).

It is for The School of Architecture to maintain and grow a program that matches the University's tradition of engagement with Boston and its complex social, political, economic, and physical development choices. To this end, Northeastern Architecture has built a curriculum around issues found in urban architecture. The Northeastern strategy is to develop and teach the tools for urban re-densification. This program deals less with the theme of architecture and nature, and more with the relationship of architecture and society. This is not to say that it does not engage the natural world; only that it does so by focusing on choices facing those in cities and their environs.

The School of Architecture explores the discipline from three perspectives: Form and Society, Theory and Practice, and Technology and Craft. The whole of the program can be understood in relation to these categories. Form and Society is perhaps the most prominent of these. It is the rubric under which political, economic and social issues are explored; the relationship of public to private space is examined; and architecture's distinction between individual expression and cultural production is discussed. The role of history and the relationship of invention to conservation also fall in this category.

The relationship of Theory and Practice is central to Northeastern University's mission. Co-operative education integrates academic and practical learning throughout the University. But in architecture it has additional meaning. The program in urban architecture explores the relationship between critical thinking and public efficacy. Boston offers a laboratory for interaction between students and the world of practical urban problems. The focus on practical efficacy demands exposure to non-traditional design forces, such as regulation and economics. Finally, it is central to the role of the urban university to find a way to effectively disseminate research in the community.

The issue of Technology and Craft is relevant to urban architecture in slightly different ways than it might be to a more traditional program. Craft in terms of high quality architectural skills, analysis and representation, is paramount. But Northeastern Architecture adds the question of urban infrastructure to the traditional understanding of discrete building construction systems. Contemporary cities must now integrate more complex systems than ever. Digital technology and its infrastructure- cell phone towers for example- can provide new opportunities for expression. In a society increasingly dependent on technology, architects can play a great role in determining how it is represented.

Architecture at Northeastern seeks to connect specific problem-solving to architectural understanding in the larger context of contemporary cities. The curriculum teaches students to conceptualize, synthesize, and represent complex architectural and urban issues.

This mission is approved and endorsed annually through a Five Year Plan process through the Office of the Dean of the College of Arts and Sciences.

5. Program Strategic Plan

The following text is taken from the 2005 Northeastern University Architecture Program Report:

The curriculum in the design studio encompasses two major themes: first, the studio projects focus on how buildings can *affect urban* conditions, and second, the projects explore the art of building. The art of building includes the study of construction and technology, as well as the cultural messages conveyed by the expression of material, structure, and form in architecture. Buildings meet both our individual need for shelter and our shared need for cultural meaning. The contemporary city is our laboratory. This urban focus requires that students integrate their own creative impulses with the future of the society of which they are part. By building on the practical and technical training afforded by co-op to develop core professional skills, the curriculum can focus on architecture's theories and principles.

The School of Architecture is becoming a leader in identifying opportunities for civic representation, urban development, and neighborhood design. But there remains much to do. What follows is an outline of the themes of the program mission, an elaboration of their meaning, and a strategic implementation plan to document their level of achievement and help chart a course for the future. The Plan is divided into two primary sections: an academic plan and an administrative one. Each section includes a set of goals, current practices, and remaining needs that reflect the connection to the overall mission.

In addition to this thematic information, attached please find a copy of the working spreadsheet used by the Director of the School to plan for additional

faculty needs, staff needs, and facilities needs as a function of growing enrollments.

Academic Perspectives Goals, Practices, and Remaining Needs

Form and Society

- Students explore the means of political communication in urban design
Housing Studio & Graduate Thesis Studio
- Students examine the relationship of the public and private spheres through design
Housing Studio & Graduate Thesis Studio
- Studio projects are designed to distinguish between architecture seen as individual expression and as cultural production and interpretation. Seminar in Modern Architecture, Project Case Studies, Housing Studio, Graduate Thesis Studio, Third Year Seminar
- Students contextualize their design work by studying the history of cities
Seminar in Modern Arch., 19th & 20th C., World Arch 1&2, Studio 2&3, Third Year Seminar

Theory and Practice

- Course work establishes a relationship between critical thinking and public efficacy
Housing Studio & Graduate Thesis Studio, Third Year Seminar, Project Case Studies 1&2
- Studios locate research projects in the world of practical urban problems
Graduate Thesis Studio, Housing Studio, Somerville Program
- Students take advantage of co-operative education as a model for specific job skills and technical training in the profession
Co-op portfolios
- The program develops mechanisms for disseminating design research in the community
Arch Web site, Publications, Conferences
- Courses expose students to the economic and regulatory environment
Project Case Studies 1 & 2
Technology and Craft
- The architectural consequences of new construction methods
Structures 2, Environmental Systems, & Integrated Building Systems
- Design studios investigate ways to better understand the role of infrastructure in shaping the environment
Graduate Thesis Studio
- Specific courses aim toward very high levels of skill in architectural representation
Graduate Thesis Studio, Adv. Representation
Need Improved Digital Sensibility throughout School

Academic Operations

Goals, Practices, and Remaining Needs

Faculty Needs

- Tenure-Track Positions
 1. Assistant/ Associate Professor in Building Systems
 2. Assistant/ Associate Professor in Computing & Design
 3. Assistant/ Associate Professor in Architectural History
 4. Additional Assistant/ Associate Professor
 - Distinguished Visiting Positions
 1. Regular funding for Distinguished Visiting Professor
 2. One semester in length
 3. Includes Housing and Research Stipend
 - Endowed faculty/ Director Positions
 1. Raise funds to support endowed positions

Faculty Support

- Research Support
 1. Introduce Research Assistants from UG & Grad students ranks

2. Establish Publications fund to support dissemination of faculty research
 - Teaching Support
1. Introduce Teaching Assistants from UG & Grad students ranks

Administrative Operations

Goals, Practices, and Remaining Needs

Administration and staffing

- Strong leadership, maintain good relationship with University,
- Good management of student affairs; listen to student needs
- Encourage strong Scholarship and creative productivity of faculty
- Maintain strong ties with profession, city, and communities
- Program director supplies overall academic direction and leadership.
- Full-time, tenure track faculty hiring is done through departmental search committees, including, when necessary, professional ad hoc committee members from outside of the school (because of the small number of full time architecture faculty).
- Curricular oversight and development is the responsibility of the program director, in consultation with full-time and part-time faculty.
- There is a single administrative assistant for the Department of Architecture (280+ students).
- Non-faculty Assistant Director \$75K
- IT Director for Architecture (to manage web, digital output, and manage basic skills courses- NEW) \$60K

Outreach and research dissemination

- Lecture Series with National Stature, focused on NU Mission
- The existing lecture series budget, runs to about \$7,000/ yr.
- Regular Exhibitions in Ryder Hall showcases are currently budgeted at \$300/ year, and dependent on loans, zero travel expenses, and donated curatorial help.
- A regular exhibitions budget needs to be established.
- The Architecture alumni database has recently been developed by the School of Architecture.
- The Alumni database must now be maintained in order to track employment, licensing, career data, and to communicate with graduates about pro gram direction and fund-raising.
- Web presence and maintenance is greatly improved, and it offers a great opportunity to disseminate research, coordinate with Northeastern research units, and communicate with prospective students and alumni.
- Color program brochure and newsletter has begun to disseminate research and recruit top students; resources have been provided for a biennial update.
- Staffing (IT person) is necessary to keep Architecture website regularly updated and current.

Facilities

- Adequate dedicated studio facilities for our students.
- Adequate digital output devices, including plotters, and 3-D modeling equipment.
- Quality Exhibition facilities
- 4,800 sf Studio Space Opened Fall 2000 at Ruggles MBTA Station
- Additional 7,000 sf expansion to open January 2006
- Architecture needs access to larger Exhibition Gallery
- Facilities for both a traditional Model Shop, and digital 3-D CAD/CAM facilities

are planned in new studio space.

- Northeastern library holdings in the NA section and other related sections number well in excess of 5,000 volumes.
- A separate Departmental office Suite was built in 2001, and the Department was made a School of Architecture in 2005.
- Additional Office space for new faculty and staff are needed in Ryder Hall At least two new staff offices, and three new faculty offices will be required.

Regular Self-Assessment and Planning Process

On the next page, find a copy of the dynamic spreadsheet used by the Director to maintain and/or plan for additional needs in faculty, staffing, facilities, and space based on increased enrollments and retention. This is the primary planning tool used in communication with senior University administration. In the following section, see the curricular matrix used at the School to coordinate academic planning.

Appendix B: The Visiting Team

Team Chair, Representing the AIA
Ronald L. Skaggs, FAIA, FACHA, FHFI
Chairman
HKS Architecture
1919 McKinney Avenue
Dallas, TX 75201-1753
(214) 969-3370
(214) 969-3397 fax
rskaggs@hksinc.com

Representing the NCARB
Karen Harris, AIA
1723 Clarkson Street
Suite 100
Denver, CO 80218
(303) 831-1547
klwharris@aol.com

Representing the AIAS
Jason Barrett
11903 Rangeline Road
Berrien Springs, MI 49103
(269) 357-9176 mobile
jasonb@andrews.edu

Representing the ACSA
Craig E. Barton
University of Virginia
School of Architecture
305 Campbell Hall
PO Box 40012
Charlottesville, VA 22904-4122
(804) 924-6467
(804) 982-2678 fax
ceb8x@virginia.edu

Appendix C: The Visit Agenda

IV. Report Signatures

Respectfully Submitted,

Ronald L. Skaggs, FAIA
Team Chair

Representing the AIA

Craig E. Barton
Team member

Representing the ACSA

Jason Barrett
Team member

Representing the AIAS

Karen Harris, AIA
Team member

Representing the NCARB

