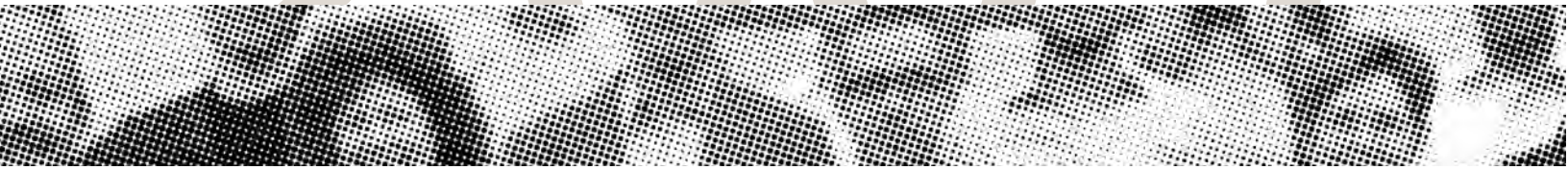
Northeastern
UNIVERSITY

2005

Architecture Program Report



September 7, 2005

School of Architecture

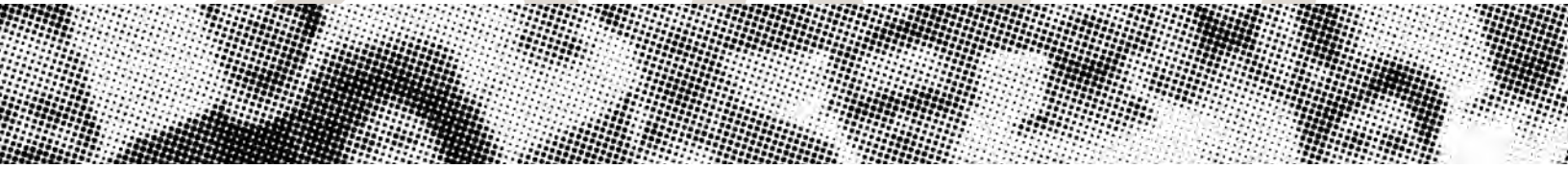
George Thrush, FAIA, Director

151 Ryder Hall
Northeastern University
Boston, MA 02115

2005

Northeastern University

Architecture Program Report



Cover Information

Program Type:

Bachelor of Science, Architecture
PLUS
Master of Architecture

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Submitted to:

The National Architectural Accreditation Board
September 7, 2005

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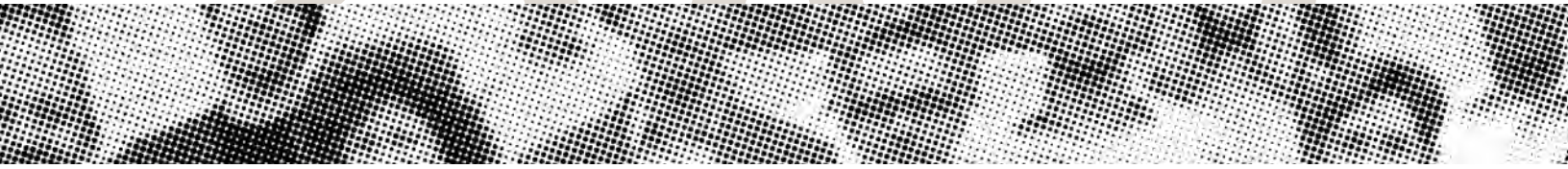

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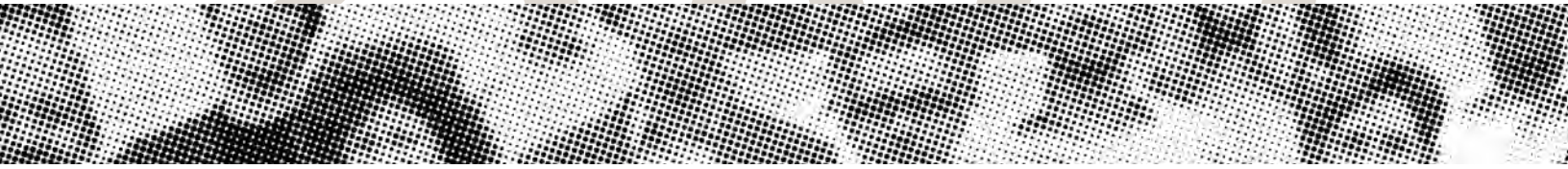

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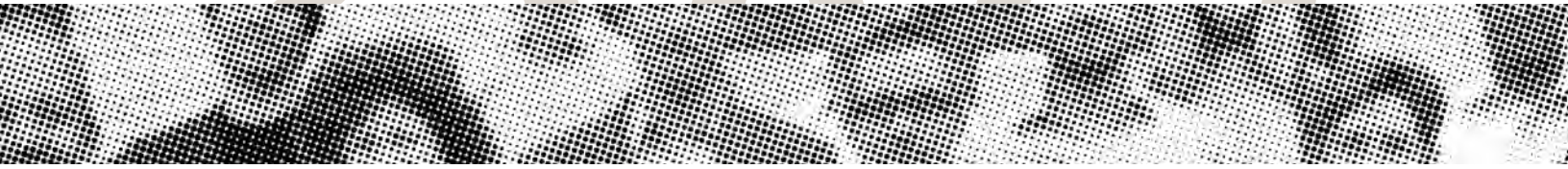


1. Introduction to the Program

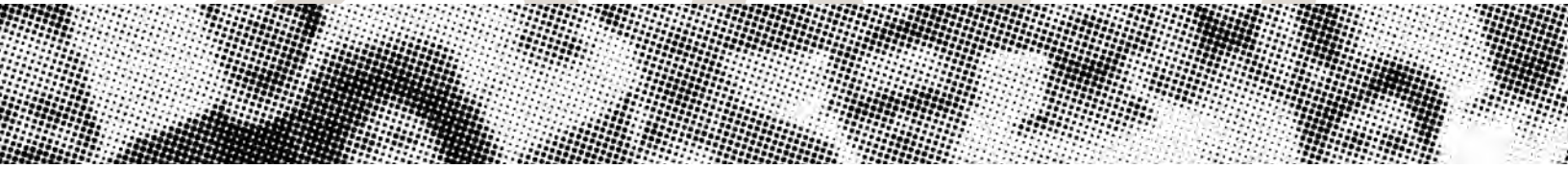
1.1 History of Northeastern University

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 play 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 Ell 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.



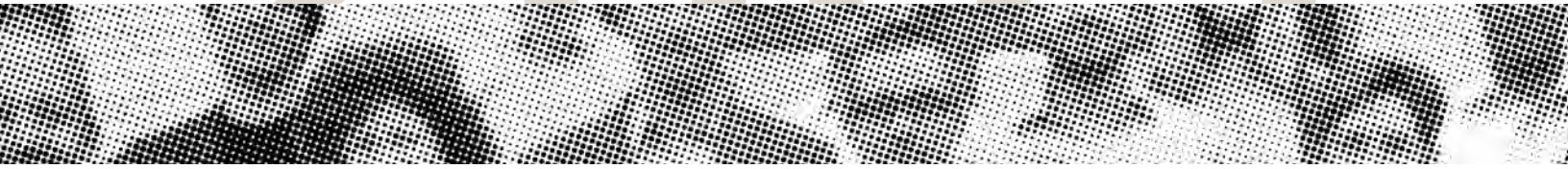
1964 Merger of Tufts University's Bouvé -Boston School with Northeastern University to form Boston-Bouve College.
1967 College of Criminal Justice established; School of Law reopened.
1975 Kenneth Gilmore Ryder inaugurated fourth president.
1982 College of Computer Science established.
1986 Studio courses 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 Bouvé College of Human Development Professions with its College of Pharmacy and Allied Health Professions to form the new Bouvé 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

1.2 Institutional Mission

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.

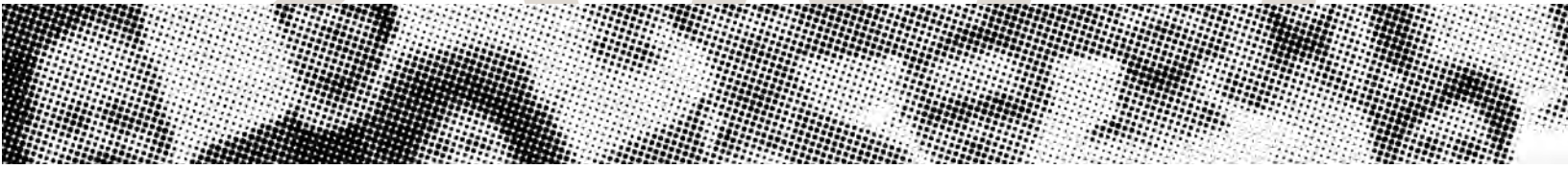
A central mandate of Northeastern University is to offer students the opportunity to apply lessons of the classroom and laboratory directly to the workplace through cooperative education. For close to a century, cooperative education has been the keystone



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.



1.3 Program History

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.

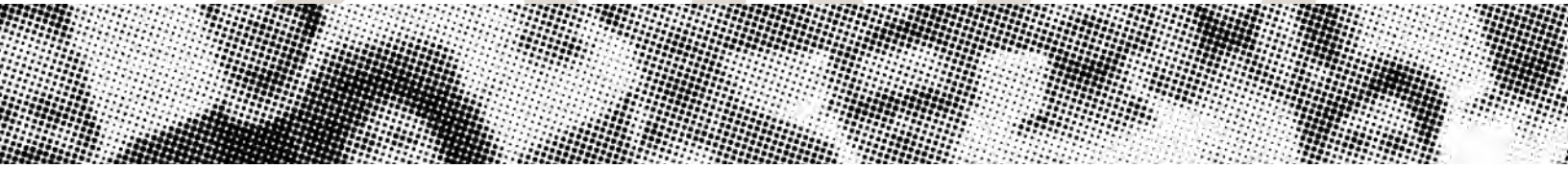
In the Fall of 1999, the College of Arts and Sciences at Northeastern recognized the architecture program's success by granting it the status of an official Major in the College. At the same time, the President, Provost, and Dean of the College requested that the Architecture faculty prepare for national, 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 has propelled the School of Architecture into prominence in the regional architecture scene.



1.4 Program Mission

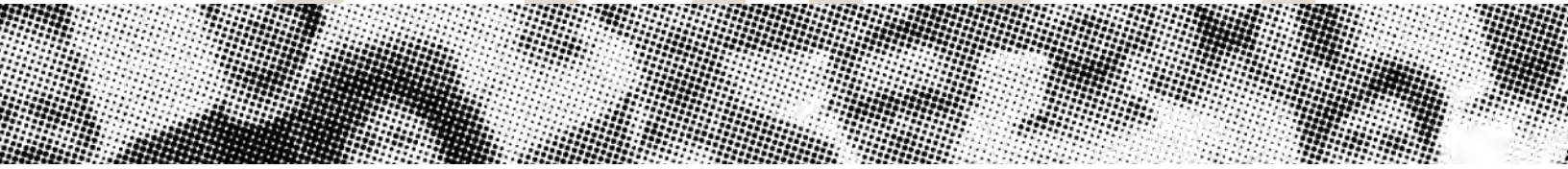
Architecture is the context for civic life. The built environment r emains the physical framework society has no choice but to share. In an age of increasingly rapid technological and social change, architects must find ways to forge civic connections between our past and our futur e. Such a task involves 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 for ces 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 Northeaster n 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 pr ogram 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 ar chitecture. The Northeastern strategy is to develop and teach the tools for urban r e-densification. This program deals less with the theme of architecture and nature, and mor e with the relationship of architecture and society. This is not to say that it does not engage t he natural world; only that it does so by focusing on choices facing those in cities and their envi - rons.

The School of Architecture explores the discipline fr om three perspectives: Form and Society, Theory and Practice, and Technology and Craft. The whole of the pr ogram 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 architec - ture's distinction between individual expr ession and cultural production is discussed. The role of history and the relationship of invention to conser vation also falls 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 pr ogram in urban

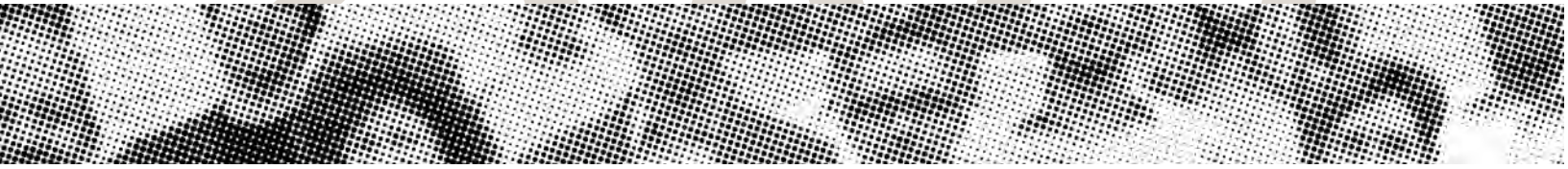


architecture explores the relationship between critical thinking and public efficacy. Boston offers a laboratory for interaction between students and the world of practical urban problems. The focus on practical efficacy demands exposure to non-traditional design forces, such as regulation and economics. 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.



1.5 Program Self-Assessment

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.

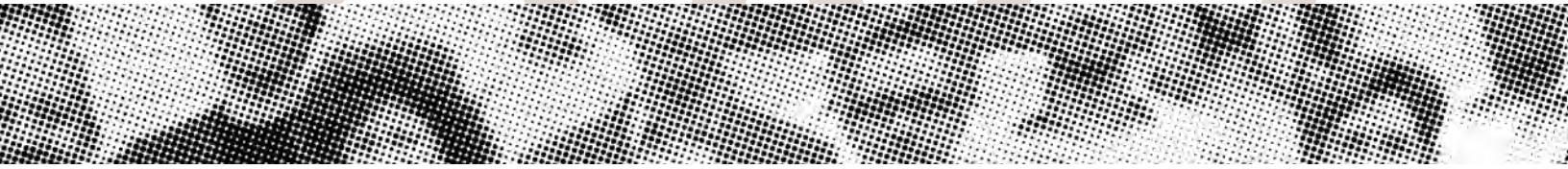
Academic Perspectives
Goals, Practices, and Remaining Needs

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 pr oblems
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 constr uction 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

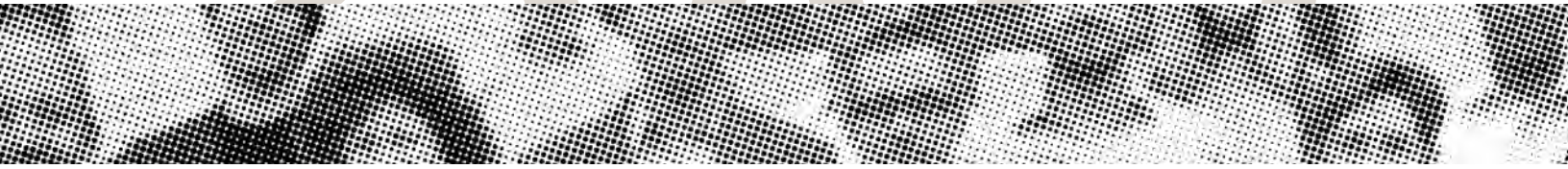
• Distinguished Visiting Positions
1. Regular funding for Distinguished V isiting Professor
2. One semester in length
3. Includes Housing and Research Stipend

• 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

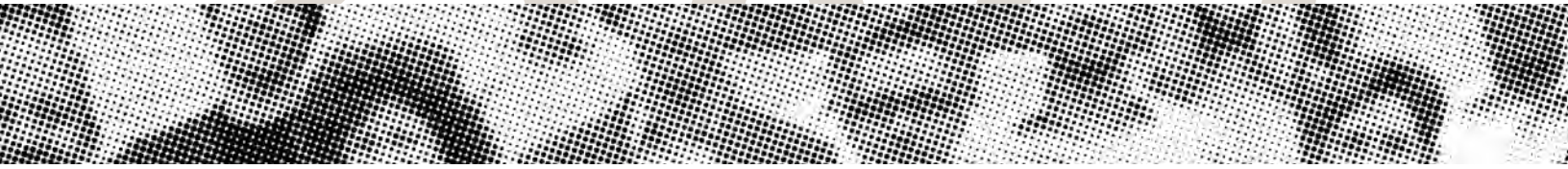
- Strong leadership, maintain good relationship with University,
- Good management of student affairs; listen to student needs
- Encourage strong Scholarship and creative productivity of faculty
- Maintain strong ties with profession, city, and communities
- Program director supplies overall academic 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 program 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 MBT A 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.

2005

Northeastern University

Architecture Program Report

architecture

Five Year Plan
Expected Enrollments
Ruggles Studio Space Situation
Faculty Needs
Revised: **4/26/05**
Prepared by: George Thrush

Expected Enrollments	Quarters	Semesters					
	2002-03 Actual	2003-04 Actual	2004-05 Projected	2005-06 Projected	2006-07 Projected	2007-08 Projected	
Freshmen	51	71	**65**	**65**	**65**	**65**	
Transfers	13	15	5	5	5	5	
Sophomores	28	61	72	63	63	63	
Middlers	21	27	55	65	57	57	
Juniors	20	19	24	49	58	51	
Seniors	19	18	17	22	44	52	
Internal Graduate Students	3	10	21	17	19	30	
External Graduate Students	0	0	0	8	8	8	
Total Graduate Students	**3**	**10**	**21**	**25**	**27**	**38**	
Total Students	155	220	259	293	319	331	

Notes:

Projections assume attrition rates of 10% from freshman to sophomore and in each subsequent year

Graduate assumptions based on 50% of BS students staying for the professional Master of Architecture
External Graduate Students is a guess

Ruggles Studio Space Situation							
Desk demand w/ **NO** space for freshmen and evenly separated co-op divisions (not competitive!)		112	149	158	184	200	
Desk demand w/ studio space for freshmen and evenly separated co-op divisions		**198**	**219**	**228**	**254**	**270**	
Current Desks	82	82	82	82	82	82	
DOCKSER DESKS			**100**	**145**	**200**	**200**	**Ruggles Exp.**
NEW Desks needed		116	**37**	**1**	**-28**	**-12**	
35 SF per Desk		4044	1307	38	-994	-437	
Needed Crit Space/classroom		600	600	600	600	600	
Needed Classrooms		1000	1000	1000	1000	1000	
Needed Plotter Space		250	250	250	250	250	
Needed Storage		400	400	400	400	400	
Needed sf		6294	3557	2288	1256	1813	
Circulation @ 10%		629	356	229	126	181	
Total Space Needed		**6924**	**3913**	**2516**	**1382**	**1994**	

Notes:

NU Installs 100 desks in Dockser Gymnasium for Fall 2004

NU adds 45-50 desks in Dockser for Fall 2005 during Ruggles Construction

Ruggles Renovation opens in Spring 2006 with +/- 270 seats

Architecture vacates Dockser

Faculty Needs						
Full-Time TT Faculty						
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Number of Faculty	6.0	7.0	7.0	6.5	8.0	9.0
Students : TT Faculty	25.8	31.5	37.0	45.1	39.9	36.8
ACSA National Avg. Ratio	17.0	17.0	17.0	17.0	17.0	17.0
	Tim Love Mo Zell	Visiting Ass't M. MacPhail (departed)	Assoc. Prof. Darell Fields (departed)	1/2 Visiting Assistant Prof. (Spring 2006)	Systems/ Technology Person Computing/ Design	Historian
Accompanying Office Space	151 RY 387 RY	151 RY	445 a&b RY		**NEW OFFICE**	**NEW OFFICE**

Notes:

Anya Bokov will serve as Visiting Assistant Prof. In Spring 2006
TWO searches in 2005-06: one Assoc. & one Assistant

Stellar Confident that UC space will open up office space in Ryder for Fall 2005

Staff/ Support Needs						
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Number of Staff	1.0	2.0	2.0	4.0	4.0	4.0
Students : FT Staff	155.0	110.2	129.3	73.3	79.8	82.8
	J. Trabelsi	L. Yaffee Co-op		FT "Program Director" **NEW OFFICE**		
Accompanying Office Space	151 RY	352 RY		FT IT person **NEW OFFICE**		

Notes:

Bokov will go to new Ryder Office (formerly Fields)
Burke will remain in 151 RY

We hire a Program Director to serve as Asistant Chair/ Director

We hire an IT person

2. Progress Since the Previous Site Visit

2.1 Summary of Responses to the Team Findings

The NAAB Visiting Team's findings in in the last visit (the Initial Accreditation visit in 2002) were generally quite positive. The VTR begins with an endorsement of the mission of the program as "well conceived, articulate, and compelling". It adds that the program has strong connections with the University, research, and the profession. The VTR compliments the leadership and the students for being engaged and energetic. In all, the team seemed to be very encouraged by the strong start of this young pr o-gram.

But there were several points that the team thought needed impr ovement, or just as often, for which they did not yet see suf ficient evidence of accomplishment– no mat-ter how clear the mission. It should also be noted that the 2002 VTR r eviewed a brand new curriculum, as the University had just switched to a semester based calendar from quarter system, and many courses from the old system were r e-worked, both in order to conform with NAAB guidelines, AND for integration with the new calendar . So, many of the performance criteria that were deemed either "not met", or "met, but with cause for concern" will find significantly more evidence supporting them this time around. Against that backdrop, what follows is an attempt to identify those remaining weaknesses and what the School of Architecture has done in the interven-ing three years to address them.

1. Team Comments

The NAAB team was impressed with the direction of the curriculum, but not yet con-vinced by all of its outcomes. In several cases there was very little student work on which to base judgments. In particular, the team wanted to see more evidence of the courses in Project Case Studies, Architectural Theory, and Digital Operations. each of these areas has been addressed in the meantime.

The Project case Studies curriculum has developed into a course that r esearched the role of many players in complex urban developments. These have recently been sup-ported by grants fr om the Massachusetts Technology Collaborative (MTC), and have been evaluating the per formance and effectiveness of energy efficient investments in schools and housing. At least 40-50 students will have passed through the course since the last VTR, so ther e will be significantly more material available

In Architectural Theory, the new course called Thir d year Seminar (ARC 330) had just been introduced (and not yet taught) at the time of the last visit. This is a superb class (based on a series of lectur es developed by Assistant Pr ofessor Tim Love during his six years teaching it to Har vard's GSD students).

Finally, in the area of digital operations, the School has improved both the cur riculum

and the facilities for digital manipulation and output. Two courses, Digital Representation (ARC 257), and Advanced Representation (ARC 358) compose the response to the need for digital training, and they are supplemented by student co-op experience. Also, the School has developed an online billing system to allow students

Manual Representation

	Duration	*Problem outline*	*Context*	*Cultural/Historical Issues*	*Design Issues/Techniques*
Assignment A	1 weeks	Manual Sketching	On site	Introduction to modern architectural and classical art masters sketching techniques. Artists include Leonardo and Michaelangelo; architects	Introduction and understanding of basic ideas of field sketching and a conceptual understanding of perspective
Assignment B	1 weeks	Albrecht Durer Letter		Introduction to artisit Albrecht Durer, 1471-1528, Durer's alphabet design based on geometric constructions	Introduction and understanding of orthographic representation and presentation
Assignment C	2 weeks	El Lissitzky Proun analysis and spatial 3D study		Introduction to the artist, architect, theorist El Lissitzky and Russain constructivist, 1890-1941. Study of his Prouns.	Understanding of the relationship between 2 and 3 dimensional space. Exploration of axonometric, composition, and 3-dimensional space.
Assignment D	3 weeks	Window	Gropius House	Introduction to opening/window design by various architects: Corbusier, Breuer, Ando	Challenge preconceived notion of architectural element. Exploration of more detailed section. Introduction of perspective drawing.
Assignment E	4 weeks	Bathroom	Maison de Verre	Introduction to additive and subtractive space making. Introduction to Philippe Starke, John Pawson, Office dA, and Pierre Chareau	Understanding of the relationship between additive and subtractive strategies in relation to program and spatial sequence. Study of representational issues relative to project program.

Digital Representation

	Duration	*Problem Outline*	*Context*	*Cultural/Historical Issues*	*Design Issues/Techniques*
Assignment A	3 weeks	Case Study Houses		The Case Study Houses (with emphasis on the work of Craig Ellwood)	Introduction to AutoCAD - the clearly zoned plans and sections of the Case Study Houses lend themselves to learning AutoCad. Students will learn the logic of layers by diagramming the elements of the houses, including; structure and enclosure.
Assignment B	3 weeks	Mies Kit-of-Parts		Mies' houses from the 1930s and early 1940s	Introduction to FormZ - Mies' vocabulary, as exemplified by the Barcelona Pavilion and the Court Houses, will be the Kit-of-Parts of elements used to learn Form-Z.
Assignment C	1 week	Collage/Montage Analysis		An understanding of the operations of collage and montage by looking at art and renderings by Braque, Matisse, Mies, etc.	Illustrator/Indesign - Students will learn the basic operations of the programs by doing a layered analysis of works of art that deploy collage and montage techniques.
Assignment D	2 weeks	Mies Perspective		Mies perspective drawings from the 1930s and 1940s	FormZ - Students will make perspectives of their Form Z assignment and then create montages using illustrator
Assignment E	1 week	Page Layout analysis		Examples of 20th century page layout (examples)	Indesign - analysis of assigned canonical examples of modern page layout design. Students will also design their own pages 'in the manner of'.
Assignment F	2 weeks	Portfolio Layout			Indesign - Students will design their own portfolios and use their work from both Manual Representation and Digital representation as the content.

Design 1

	Duration	*Problem outline*	*Context*	*Cultural/Historical Issues*	*Design Issues*
Assignment A	1 week	Kit-of-Parts Contemplative Garden	Christian Science Center complex	I.M. Pei/Sasaki designed monumental urban renewal project and significant modernist landscape.	Understanding of architectural operations and the reciprocal relationship between building and landscape
Assignment B	3 weeks	Outdoor Café and Landscape			Understanding of the relationship between programmatic demands and architectural strategies, develop an understanding of additive, subtractive, and transformative strategies.
Assignment C	1 week	Analysis of Entrance Sequence and Stair of the Boston Public	Charles McKim, Boston Public Library		Develop an understanding of the relationship between precise architectural decisions and the intentions of a spatial
Assignment D	3 weeks	New Stair for a University Art Museum	The plan and section of the assignment are	John Singer Sargent, American 1856-1925, *The Daughters of Edward Darley* Rogier van der Weyden, Flemish. ca. 1400-died 1464, *Saint Luke Painting the Virgin*	Develop an argument for an elaborately orchestrated spatial sequence based on an interpretation of two paintings.
Assignment E	4 weeks	Temporary Pavilion for John Singer Sargent's *El Jaleo*	Isabella Stewart Gardner Museum and the adjacent Evans Way Park	John Singer Sargent, American 1856-1925, *El Jaleo* (Isabella Stewart Gardner Museum, Boston)	Design a pavilion and associated landscape for a specific mural-sized painting.

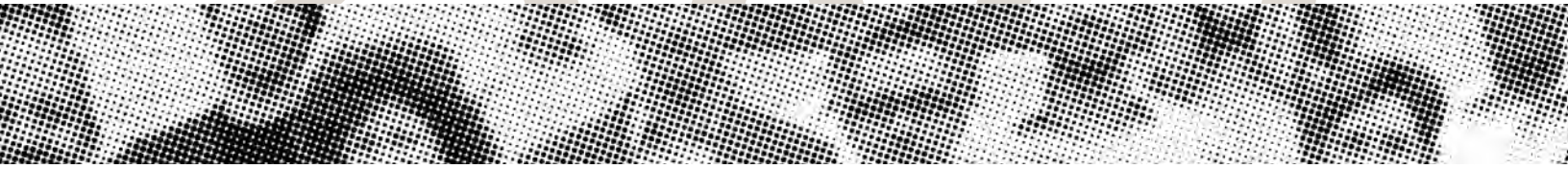
Design 2

	Duration	*Problem outline*	*Context*	*Cultural/Historical Issues*	*Design Issues*
Assignment A	2 weeks	City Hall Plaza Analysis	City Hall Plaza	The 19th century American city and 1960s American Urban renewal	
Assignment B	1 week	Vertical Circulation in a Party Wall Building	Generic infill site	Infill building precedent	Narrow site biases the section over the plan. Initial understanding of stairs and elevators.
Assignment C	4 weeks	Modern Chair Institute for an Infill Site	Boston's South End	Figure/ground pattern and typologies of a 19th Century rowhouse district Significant 20th-century chairs and their designers	Orchestrate a spatial sequence within the constraints of an infill building.
Assignment D	5 weeks	Library and garden at the Christian Science Center	Christian Science Center	I.M. Pei/Sasaki designed monumental urban renewal project and significant modernist landscape.	Design an institution and open space on a complex urban site.

to pay (at a reduced rate) for output from digital plotters and a laser cutting machine. The syllabi for the digital courses reflects a more substantial integration with the curriculum in manual representation, and also with the foundation design studios. Below please find a matrix used by the school when adjusting the content or sequence of any of these courses.

Self-Assessment

The 2002 NAAB team sought more evidence of student involvement and feedback in the program. Since that time, The School has incr eased funding for AIAS, and meets regularly with its representatives. In addition, an “All School Meeting” has been introduced, that allows all students and faculty to meet in one place to discuss any issues of interest to the student body.



Human Resources

The School of Architecture remains in serious need of administrative assistance. As the School has grown to 300 students, it is still run with a Dir ector and a single administrative support person (Office Manager Danielle Walquist). There is also a shared slide librarian and a full-time co-op coor dinator. But there is no IT support person for the School, nor is there a full-time, Assistant Director to help manage the rapidly growing management of the School, and to pr ovide additional student services. Both are critical.

As for faculty, the University was very supportive of bringing in a top African-American faculty member as a tenured Associate Professor in 2004-05, only to lose that person in a single year to another institution. It was not for lack of suppor t, but the effect of this loss was to slow down the alr eady anemic hiring pace with respect to the growth in enrollments. 2005-06 has the School searching for what amounts t o the last of the initial three positions promised in 2001, prior to initial accreditation. This slow pace has resulted in a significant rise in the ratio of Students to T/TT faculty , from 26:1 in 2002-03, to 47:1 in 2005-06. The School needs three additional TT positions as quickly as possible (the ACSA Average for this region is 17:1), ie. within the next two years, and another three in the years that follow . (It should be noted that a higher student/ TT Faculty ratio is to be expected at an urban school with a reliably excellent adjunct faculty pool, but a critical mass of T enured, and Tenure-Track faculty is necessary to maintain the quality of any school).

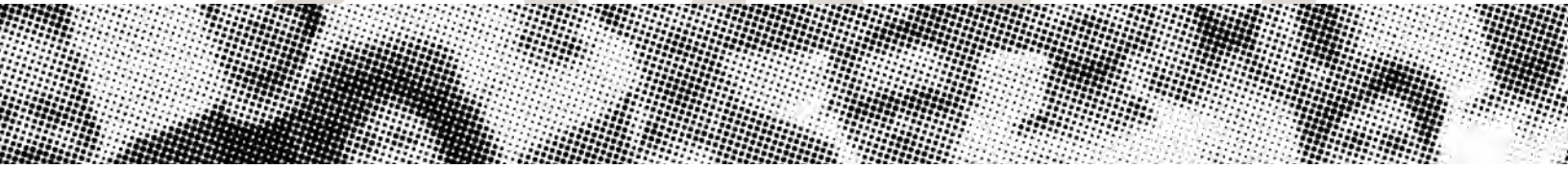
Information Resources

The Northeastern Library System has been working the School to continue to expand its modest holdings in Ar chitecture and related areas. More needs to be done to speed up this process.Online resources ar e growing more and more accessible to students.

Working with the University's Information Services unit, Architecture expects to be part of a pilot project that will allow students and faculty to access a wide range of architecture software from dorm rooms, offices, the design studio, and of f-campus. This will ensure that everyone is using the same version of software, and make piracy much less of a problem.

Financial Resources

In 2002, the VTR noted that "funding remains barely adequate". Sadly , though the School has doubled in size since then, the operating budget has not increased at all. But the largest issue remains the financial support for personnel. As mentioned in the Human Resources Section, the 2002 VTR called for "the program will need further fac - ulty lines beyond those projected [the original three lines that resulted in pr ofessors Love, Zell, and this year's search] and better administrative backup to the Chair [Director], the faculty, and student ser vices". Much remains to be done in this area.



The 2002 VTR also pointed to the need for faculty (and we would add, for staf f too) in the Information Technology. The School has made great strides in this area with regard to curricular development, and management of digital output for students (both very important), but the necessary personal suppor t remains missing. The School also feels that a regular fund for visiting faculty should supplement the aggressive search for T/TT positions.

The discretionary portion of the School of Architectur e's budget is currently very small. With more than 300 students, the School has approximately $25,000 to spend on the lecture series, exhibitions, research, student activities, research support, and miscellaneous expenses. The School estimates that this figur e needs to be closer to $100,000 annually.

Last year, the School presented a strategic plan to the University that included a rise in the number of graduate students (revenue from graduates students is considered "marginal revenue" at the University, because overall undergraduate enrollments are capped at 2800-3000, and therefore additional architectur e students among that number do not increase the overall revenue stream, whereas additional graduate stu - dents do increase the total revenue to the University, and individual units- like ar chi- tecture- are expected to participate dir ectly in that new revenue). The plan called for architecture adding 10 new graduate students to last year' s total of 20, and using a significant portion of the $250,000 in additional revenue that would create to raise the School's operating budget by $75,000, and to add two new staf f positions; an assistant director (at +/- $75,000/yr) and an IT person (@ +/-$65,000/yr). Though the graduate program was opened to students from outside of Northeaster n for the first time, the target was not met in 2005-06, but will be met very soon with a larg e expected rise in graduate enr ollments springing from the much lar ge size of under- graduate classes already in the "pipeline".

Administrative Structure

The University has recently changed the Department of Architectur e to a School of Architecture, as part of an ef fort to single it out for accomplishments and allow it to better compete with major regional schools. The 2002 VTR called for updated Governance Documents, which has largely been accomplished, but it also called for RA/TA budgets, which have not yet come to pass.

Criteria Met with Cause for Concer n

Criterion 12.13

The 2002 VTR expressed concern regar ding the breadth of of ferings in the environmental and ecological areas. Since then, a strengthened Envir onmental Systems course (ARC U555) and a significantly improved pair of Project Case Studies courses (ARC G315 & G316) has addressed this issue. In addition, the School is now in the second year of a $60k/yr grant for evaluating the ef fectiveness of sustainable building technologies ologies in schools and housing developments, funded by the

Massachusetts Technology Collaborative (MTC).

Criterion 12.19

The Integrated Building Systems course (ARC U656) has been expanded to include more of the life-safety area in its syllabus and course work. More work could be done in this area, and it will benefit from the hiring of a full-time, tenure-track person in building systems.

Criterion 12.20

Building envelope issues are also addressed in significant ways in Integrated Building Systems (ARC U656), which was, at the time of the 2002 visit, a brand new course.

Criterion 12.21

Building Service Systems are also addressed in the Integrated Building Systems course (ARC U656), and should be better documented in the 2006 visit.

Criterion 12.24

Greater evidence of student understanding of codes, regulations, and standards can now be found in two places: first, in the Project Case Studies sequence (ARC G315 & G316), and also in the new co-op portfolios that have been produced since the last NAAB visit in 2002 in order to better document student achievement and learning while on co-op.

Criterion 12.26

Development financing, building economics, and construction cost control are all addressed in the Project Case Studies sequence (ARC G315 & G316). Students trace the evolution of complex development projects, through financing, public review, design, and construction.

Criterion 12.33

Contracts and documentation were underrepresented ted in the early cur riculum shown to the NAAB team in 2002. Since that time, the project case Studies sequence has grown to address these areas and will supply the documentation of their inclusion in the curriculum.

Criterion 12.37

Ethical issues are also addressed in Project Case Studies.

Criteria Not Met

Criterion 12.14

The Housing Studio (ARC U510), as well as other upper level design studios, each include attention to accessibility requirements, and the product of these studio will provide evidence of this.

Criterion 12.22

The integration of structural, environmental, life-safety, and building envelope systems is one of the fundamental missions of ARC U656 (Integrated Building Systems). This course was essentially brand new when the NAAB team visited in 2002.

Criterion 12.27

The level of the detail and its integration to an ar chitectural project is addressed directly in ARC U511 (The Tectonics Studio), and has been better coordinat - ed with the Integrated Building Systems course (ARC U656) since the 2002 visit.

Criterion 12.28

Students routinely make technically precise descriptions and documentation in the Tectonics studio (ARC U511) and on co-op, as evidenced by the co-op portfolios.

Criterion 12.29

Comprehensive design is addressed by the students taking both ARC U511 (The Tectonics Studio) and ARC U656 (Integrated Building Systems) at the same time, and by creating overlap between the two courses..

Criterion 12.30

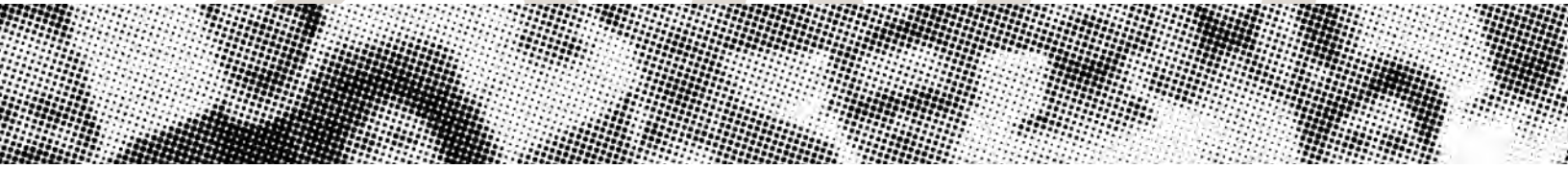
Students will be able to present improved evidence of being able to prepar e and respond to a detailed building or project pr ogram. Given the focus of the sc hool, this is often at the scale of a lar ger project, like an institution, rather than a discr ete building.

2.2 Summary of Responses to the Changes in the NAAB Conditions

The School of Ar chitecture is committed to following all of the newly revised NAAB *Conditions*. To that end, the new T able of Contents has been incorporated, and the old "Strategic Plan", has been replaced by a more streamlined, and customized, "Self-Assessment Document". To be fair, because this program is quite young, it has been very focused on the clarity of its direction from the star t, and the kind of "mission drift" that might happen at more established schools is not as likely here. The pr o-gram is in a near constant state of "self- assessment" by virtue of its need to continue to hone and sharpen the message, mission, and cur riculum of the School. The process is outlined clearly in the new Program Self Assessment section (Section 3.2).

The NAAB website will be linked to that of the School of Architecture so that students and faculty alike can gain access to the new performance criteria (and architectur e syl-labi are now requir ed to include those criteria that the course is intended to meet).

With the establishment of a new, enlarged, dedicated design studio (Spring 2006), the

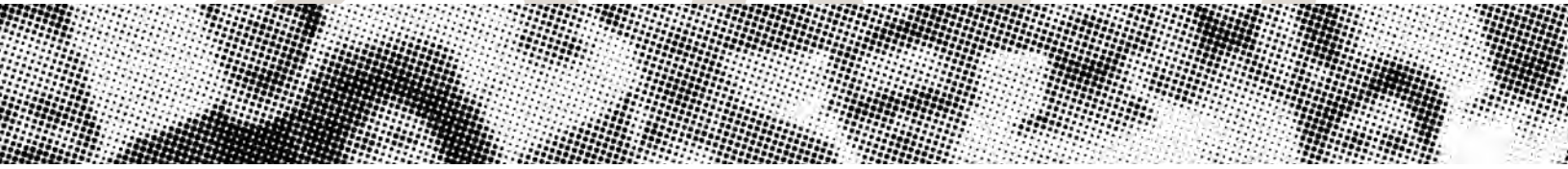


Achieved Since 2002 NAAB Visit — • weak •• medium ••• strong

Part 1. Academic Goals and Current Practices	Articulated	Approved	Implemented
Form and Society			
Political Communication	•••	•••	•••
Public and Private Spheres	•••	•••	•••
Individual Expression/ Cultural Production	•••	•••	•••
History of Cities	•••	•••	••
Theory and Practice			
Critical Thinking and Public Efficacy	•••	•••	•••
Practical Urban Problems	•••	•••	•••
Co-op for Technical Training	•••	•••	•••
Dissemination of Research	•••	•••	•••
Economic & Regulatory Training	•••	•••	•••
Technology and Craft			
Architecture and New Construction	•••	•••	•••
Infrastructure and the Environment	•••	•••	•••
Architectural Representation	•••	•••	••

Achieved Since 2002 NAAB Visit — • weak •• medium ••• strong

Part 2. Administrative Goals and Current Practices	Articulated	Approved	Implemented
Administration and staffing			
Director supplies academic direction	•••	•••	•••
Competitive Director Salary	•••	•••	••
Faculty hiring	•••	•••	••
Assistant/ Assoc. Prof. In Computing & Design	•••	•••	••
Assistant/ Assoc. Prof. In Building Systems	•••	•	•
Assistant/ Assoc. Prof. In Architectural History	•••	•	•
Assistant/ Assoc. Prof.	•	•	•
Curricular oversight	•••	•••	•••
Staff Position #1/ Admin. Ass't.	•••	•••	•••
Assistant Director/ Student Services	•••	•	•
Web & IT manager	•••	•	•
Co-op coordinator	•••	•••	•••
Outreach and research dissemination			
Lecture Series	•••	•••	•••
Exhibitions	•••	••	••
Alumni database	•••	•••	•••
Web site and maintenance	••	••	••
Color program brochure	•••	•••	•••
Newsletter	•••	•	•
Facilities			
Ruggles Studio Space	•••	•••	•••
Exhibit Gallery	•••	••	••
Model Shop	•••	•	•
Departmental Office Suite	•••	•••	•••



School will also outline its description of "Studio Culture" in conformance with this new requirement.

The library requirement for minimum volumes has been adjusted to include other related call numbers beyond the NA section.

Northeastern University is accredited by the New England Association of Schools and Colleges (NEASC).

The six-year Master of Architecture degree includes 51 semester of hours of courses with no architectural content.

The new 34 performance criteria have served as the basis for this APR, and the new ones: Sustainable design and the client role in architecture have been included, and are both addressed significantly in the Project case Studies sequence (ARC G315 & G316).

3. The Thirteen Conditions of Accreditation

3.1 Program Responses to the NAAB perspectives

3.1.1 Architecture Education in 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.

2004 Conditions, NAAB

Role within the University

Located in the College of Arts and Sciences, but set more broadly within a practice-oriented university, the School of Architecture plays a critical role in linking the liberal arts with the world beyond the university. As the University has been recently transformed from a commuter school to a major urban campus, the role of architecture and urban design in this transformation is visible to students, faculty, and administrators alike.

Conceptual Fit with University

The Northeastern Architecture Program benefits from a very strong conceptual fit with the mission of the University. The University has a history of using the practical problems of the metropolitan area and its residents as the primary focus of its research. Whether those problems are economic, social, or physical, Northeastern scholarship is trained on solutions. In the current climate of radical change in the Boston area, the issue of physical development and neighborhood character has emerged as one of the most critical issues for the future of the city. In order to address this particular aspect of architecture and urban design, Northeastern has focused its architecture program on "urban architecture". Many of the design studios focus on particular aspects of urban architecture and the challenges facing it in the coming decades. These include the study of new building types, the role of infrastructure in urban development, developing models for peripheral growth, and the role of new housing strategies in maintaining a livable environment for urban residents.

Standards and Interdisciplinary Opportunities

A critical part of this academic focus is the maintenance of strong academic standards. As members of the College of Arts and Sciences, Architecture students must maintain a 2.5 minimum GPA in order to remain in good standing. But more critically, students are expected to develop strong specific architectural skills in drawing, design, analysis, and research. Students also gain from constant exposure to the larger university, where their required courses take them to the English, Math, Physics, and History departments. In addition, many students opt to take courses in entrepreneurial studies, finance, or real estate development, in the College of Business.

In this area, however, there remain many opportunities for improvement. More spe-

cific relationships with the College of Business, the School of Law , and the College of Engineering can be developed in order to better integrate the tremendous urban-focused resources available at Northeastern University. The Department of Architecture has recently enhanced relationships with the G.I.S. mapping research of the Department of Environmental Science. Graduate students now take G.I.S. courses there. Also, urban architecture is a natural partner with the N.U. Center for Urban and Regional Policy (CURP), headed by Trustee Professor Barry Bluestone, Ph. D. Since the last NAAB visit (fall, 2002) the School of Architecture has worked with CURP and the World Class Housing Collaborative through the Housing Studio on sites in Somerville and Boston. There are also other distinct opportunities for joint, funded research with CURP; especially in developing strategies for post-industrial land use with railroads and utilities.

Pedagogical Intentions

Architecture at Northeastern is also held together by strong academic guidelines. The core studio sequence focuses on specific skills: manual and digital representation, conceptual thinking, composition, typology, urban design, tectonics, housing, and urban intervention (Graduate Thesis Studio). This structure has allowed Northeastern to resist the culture of "personal authenticity" as the sole criterion for design evaluation. Avoiding this problem reflects an academic bias at the school: namely that architecture, especially urban architecture, is a social act. It includes the personal journey of "finding one's voice", to be sure, but it is more critically a question of learning language and technique. To this end, our courses are about learning the essentials of the language of architecture, and the many contingencies of its application in urban situations.

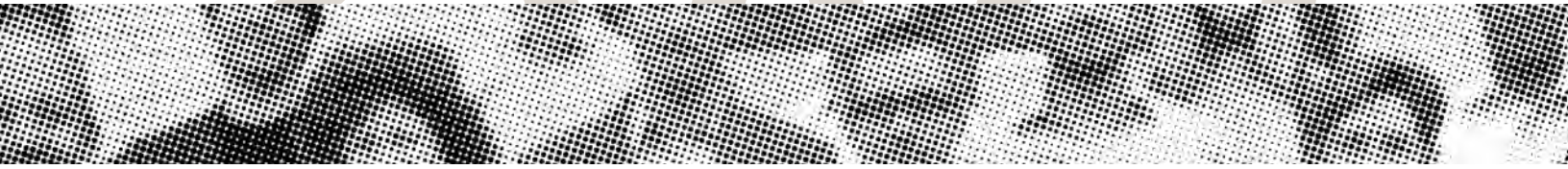
University Core Curriculum

All Northeastern students take a core of liberal arts classes from areas outside of their major. All Architecture students take specific english, mathematics, social science, and writing courses in addition to a selection of upper level liberal arts courses from different categories. (In the NAAB accredited M.Arch. six-year curriculum, the non-architecture courses amount to 51 semester hours).These courses allow even an architecture student to substantively develop another academic interest, or to broaden herself through exposure to a wide range of topics.

3.1.2 Architecture Education and the 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.

2004 Conditions, NAAB



Student Resources

The School of Architecture benefits from its par ticipation in the broader university setting with regard to its support and encouragement of students. Student counsel - ing, extracurricular activities, social events, entertainment, and athletic opportunities abound on the university campus in particular, and in the City of Boston more gener- ally. In addition, the well established system of cooperative education and its adminis- trative support offers students a sour ce of information about the profession they will be entering. Moreover, other area institutions, such the Harvard Design School, MIT School of Architecture, Boston Architectural Center, and the Boston Society of Architects provide a rich mix of lectures, exhibitions, r eviews, and symposia to expand students' awareness of, and participation in, the field of architectur e. The students have a significant chapter of the A.I.A.S. on campus, which has become ver y active in support of incoming student needs, and also of fers a window into leadership roles in the profession.

Student Community

Since the last visit of the NAAB the integration of students, faculty , and administra- tors into the social, intellectual, and gover nance life of the pr ogram has impr oved in many ways. Several specific groups have been formed to include many more people in the governance of the school. The existing AIAS chapter has grown enormously , and is very active in students life. It holds r egular meetings,gets involved with national affairs, and most inter estingly, has begun to sponsor studio orientation workshops for freshmen. All of this without any direct faculty supervision. In addition, r ecent meet- ings of AIAS have begun to invite the School Director and faculty as a way to commu- nicate student needs directly to the Department. These meetings are extr emely help- ful, and the School is doing everything to encourage them to continue. In addition to student participation through the AIAS, there is a gr owing sense of community that has sprung up around the design studios at Ruggles MBT A Station and Dockser Hall Gymnasium.

Student Diversity and Admissions

Student diversity at Nor theastern is a great strength of the program. The University , and the architecture program in par ticular, has representatives from wide range of countries, including all major continents. Each new class is mor e diverse in its make-up than the one before it, and more diverse than most architectur e schools in the U.S. But that distribution still does not reflect as many African-American students as it should (though many more than in 2002). A program whose focus is urban issues has a special obligation to encourage urban minority par ticipation. We have had several specific successes in this area, where African-American and Latino students from eco - nomically disadvantaged urban backgrounds have made it through the program suc - cessfully, but there is room here for mor e improvement.

In the academic sphere, all students are initially exposed to a wide range of architec- ture in a two-part survey of "W orld Architecture". But the focus of the program remains on the local issues of contemporary American cities, especially Boston, with a focus on urban sites and outreach to communities at the periphery of political and design attention.

Advising
Northeastern Architecture students have access to multiple levels of advising. There is an advisor for general academic issues at the Office of the Dean of the College of Arts and Sciences. Her name is Olivia Martel, and her job is to help students get into classes and work within the prescribed curriculum. She is excellent. There is also a dedicated advisor for co-op. Lynn Burke because our full-time co-op coordinator just over a year ago, and already managed to raise the School's co-op placement to 100%. Her job is to work with employers and students to coordinate their ongoing co-op job placements. Finally, each full-time faculty member has at least three hours per week dedicated to student advising in his or her office. The Director is obliged to make himself available even more often than that (one reason that more student services help is needed). The Architecture web site allows students to check course sequences, and to contact their advisor by email as well. With more material available to students on both the department and University web sites, more advising now surrounds goals and mentoring rather than the logistics of course registration, though the University still has much progress to make in this area.

Scholarships
Though the School lacks any dedicated scholarship funds, there are many available through the College and University. University financial aid has risen dramatically in the past five years at Northeastern, and while it is still expensive to go to school here, the costs have become more predictable, and more manageable.The School of Architecture has a goal of using development funds to endow specific scholarships. The Director has been working consistently with the University Development office in this regard, but with very disappointing results to date.

3.1.3 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.

2004 Conditions, NAAB

Co-op and Internship
Preparation for the world of work is the centerpiece of the historical mission of Northeastern. From its beginnings in the YMCA to the development of the cooperative education model, linking education to practical training has always been Northeastern's way. This is what made professional architecture such a good fit at the University. Since the last NAAB visit, efforts have been made to better coordinate the organization and classification of co-op jobs that students take during their education with some of the 37 NAAB student performance criteria (now 34). The result is that co-op students are now required to make a co-op portfolio that documents the work they have done toward meeting the appropriate NAAB criteria. Co-op is not cited by

itself for any criterion however, because without an academic method of meeting the requirement, the School would have to rely on employers over which it has no *direct* control.

Also, since Northeastern began the accreditation process, NCARB has recognized our efforts by allowing co-op work performed after the third year of the B.S. (Arch.) program to count for IDP credit as a formal part of our students' professional internship. In the 2005-06 academic year, representatives from IDP will be making several visits to the School (coordinated by AIAS) in order to help students get started with their IDP accounts.

Previous Northeastern Architecture Graduates

As the architecture program at Northeastern is quite young (1991-92 was the first class to graduate with a small complement of coordinated studios; and 2001 was the first graduating class with the M.Arch. degree)), there has been no systematic record-keeping with regard to the number of graduates who have proceeded to licensure, but we may be fairly certain that even for the students out of school the longest, that number is quite small. A much larger number of students has proceeded to the profession, however. And of those, many have continued on to obtain NAAB accredited Master's Degrees. Indeed, in its short history, Northeastern has already sent ten of its graduates on to the Harvard Graduate School of Design. Since the 2002 NAAB visit, Northeastern has just developed an alumni contact database in order to track advanced degrees, licensure, career advancement, and other indicators of the program's effectiveness. conducting surveys based on this new information will become an important task moving forward.

3.1.4 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.
2004 Conditions, NAAB

The Professional Community and the School

Following the 2000 NAAB visit, the School of Architecture initiated a new External Advisory Board, composed of senior members of the architectural, development, and government regulatory communities. This board, which includes those listed below, has begun to advise the School on long range issues related to mission, studio focus, and research. They also keep the program in close touch with the "issues on the ground"

within the Boston scene. The group has continued to grow and its advice is very important. It includes, among many others:

- Barry Bluestone (urban economist)
- William Rawn (architect & urban designer)
- Alex Krieger (architect & urban designer)
- Joseph Corcoran (real estate developer)
- Richard Sommer (urban design and scholar)
- Jane Weinzapfel (architect and BSA President-Elect)
- Anthony Pangaro (real estate developer)
- Willy Sclarsic (architect and real estate developer)

Practice and Research

Needless to say, maintaining a relationship between practice and research is what makes Northeastern University unique. In Architecture, they remain connected through studio projects that build on previous work, such as the many design studio projects done over the past 8-10 years on the so-called "Urban Ring" in Boston. This armature for circumferential development was explored in critical terms by George Thrush in a series of refereed articles, public charrettes, publications, and exhibitions before becoming a staple of the advanced studio curriculum. Both Elizabeth Cromley's and Peter Wiederspahn's work on housing has worked in a similar way. Both have provided students in the Housing Studio with critical attitudes to inform their design work. And most recently, Tim Love's critical work on market-rate housing and building types, and on architectural theory and zoning, has been very significant in advancing the school's agenda within the profession.

Understanding Design Forces

The most recent addition to the NU Architecture curriculum (2002-03) is a pair of heavily research based graduate courses centered on understanding how design operates in the contemporary city. Far from the "genius architect" model, the courses (Project Case Studies 1&2) expose students to the complex relationship of regulation, to finance, to construction methods, and marketing. This set of courses tries to answer the question "where is design?" in a variety of complex settings. Some of the complex work done by students is accessible in the research section of the NU Architecture web site at <www.architecture.neu.edu>.

Diversity

Northeastern Architecture is centered in a diverse city and region. It draws students from countries throughout the world. Students work on projects in widely varying parts of the metropolitan Boston area. Consultants to studio projects are often city officials and members of community groups who act as visiting critics. As examples, Design 6/ the Housing Studio and Boston Studio/ Thesis 1 and 2 have brought in city officials and community representatives to work with design professionals in evaluating and informing student work.

In the design studios students routinely face problems of changing building types and their relationship to the traditional city . For example one current thesis student is designing a student-oriented public facility that houses both existing elevated road-

ways while at the same time reinforcing Olmsted's Emerald Necklace. In addition to addressing new building types, members of the Northeastern faculty have been out - spoken advocates of reform in urban development regulations by means of published documents, op-ed pieces and community design charrettes.

Access to Technology
Northeastern students have full access to a university computer network and extensive facilities for computer aided design and image manipulation. The library at Northeastern is a member of a consortium of 18 local libraries with enormous resources in the field of architecture. Moreover within the context of the br oader university, there are extensive resources in other relevant research areas such as GIS mapping and urban economics. In addition, the School of Architecture will be part of a pilot program run by the University' s Information Services unit in 2005-06 to cr eate a remote server that will hold all architecture software and pr ovide remote storage for students and faculty to access from anywhere– on or of f-campus.

Community Outreach
Professional community members are extensively involved in the life of the school in the form of visiting critics and jur ors, adjunct faculty members, program advisors, and lecturers in the annual lecture series. Full-time design faculty are all licensed practitioners and active members of the Boston Society of Architects and the AIA. Indeed, George Thrush, Dir ector of the School of Ar chitecture, won a National AIA Y oung Architects' Citation in part for for his work in pr ecisely this kind of community outr each, and this past year was further recognized by his elevation to the College of Fellows.

Access to Allied Professionals
Students have ongoing exposure to practitioners and architectural historians on the faculty who maintain an active interest in architectural research. Inspired by the faculty as role models, they learn how to learn, and also learn that education is a continuing, lifelong pursuit. In Peter Wiederspahn's Housing design studio (ARC U510) students collaborate on matters of site design, building typology, and program development based on demographics, very much like these processes work in practice.

Gaining exposure to elementary aspects of allied technical fields, Nor theastern Architecture students learn to communicate ef fectively with structural and environmental engineers. By focusing design studio pr ojects on real sites with real contingencies, students are forced to reconcile conflicts between multiple obligations fr om an early point in their studies

3.1.5 Architectural 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 addr ess these problems with sound architecture and urban design decisions. In the APR, the accredited degree program may cover such issues as how students ga in an understanding of architecture as a social art, including the complex pr ocesses carried out by the multiple stakeholders who shape built environments; the emphasis given to generating the knowledge that can mitigate social and envir onmental 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.
2004 Conditions, NAAB

Social Focus
In the Northeastern Architectur e program, the focus is on architecture as a means of cultural production as opposed to architecture solely as a vehicle for individual genius. Among the many ways that the program reinforces this vision is in the design studio, the case studies courses, history , and the public lecture series, which this year features nationally known architects, urban designers, historians, and social theorists.

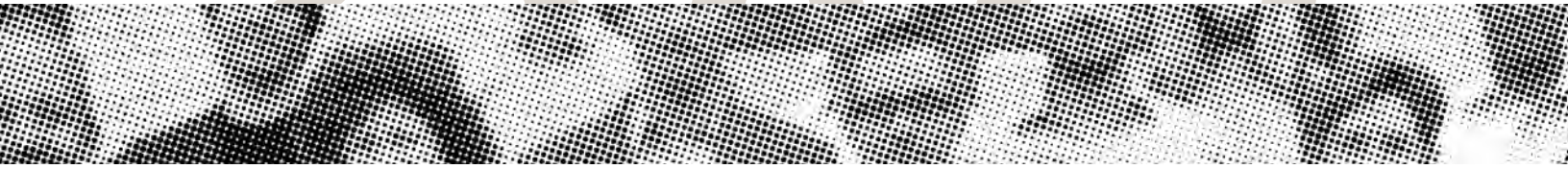
In courses from design studios on housing to the History of the American House, students are informed about the ethical implications of decisions regarding the built environment. For example, our Boston Studio and Graduate Thesis projects are addressing the intersection of architecture and urban design in several different contested areas of the city. Sullivan Square, the South Bay area, and the Alewife MBT A Station all involve transportation infrastr ucture, fragmented neighborhoods, and new opportunities for civic representation. The Project Case Studies class spent an entir e term analyzing the detailed r elationships between ar chitects, engineers, gover nment of ficials, financiers, and neighborhood groups in one of Boston's most successful mixed-use urban redevelopment projects, Millennium Place.

3.2 Program Self-Assessment Procedures

The School of Architecture assesses itself in several ways. Faculty are evaluated by students using two different processes at the end of each course, one for the Department and another for the University as a whole. Both are used extensively in all tenure and promotion reviews. W ith regard to curricular and overall program assessment, and in response to the 2002 NAAB VTR, the School has already begun working with an External Advisory Board, and has an occasional interaction with an informal Student and Alumni Board (as alumni numbers incr ease, growth in this area is possible). Both are well aware of the School' s focus, objectives, and future plans, and offering their comments so that the School can move for ward.

The School of Architecture has made great progress toward achieving a coor dinated mission. All curricular, hiring, outreach, and research decisions are guided by the it. It is stated clearly in both printed and web-disseminated materials regarding the School. Studio and history faculty alike, along with students, and the Boston design community, all seem to support the program's strategy to bring design excellence to bear on local urban problems. The mission statement's basic themes, form and society, theory and practice, and technology and craft, are already situated in the curriculum and character of the program. The specific goals of Northeastern Architectur e and the progress toward them will be enumerated in the next section.

The implementation of the plan is shown graphically , in the Directors' Spreadsheet (see page 23) and also in the chart on progr ess since the last NAAB visit (see page 15), and is summarized in a brief narrative. Progress towar d the goals is shown with respect to quantifiable needs of the pr ogram (space, faculty, resources). Specific



achievements and remaining obstacles are enumerated here.

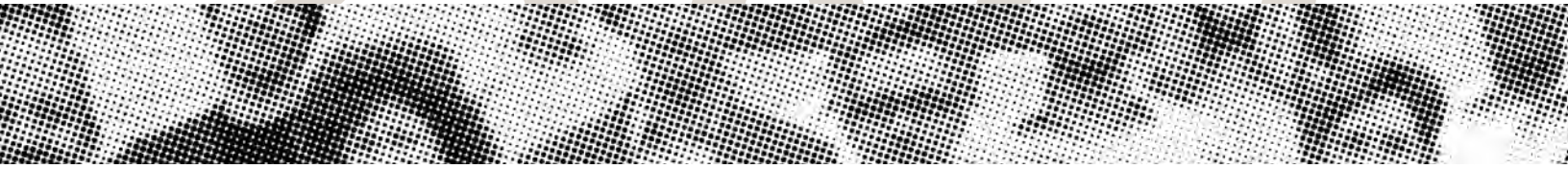
There have been many major achievements in Architecture to date, and many since the both the 2000 and 2002 NAAB visits. Courses to satisfy the needs outlined in the mission statement and strategic plan have been designed and implemented, and all three new hires promised by the administration in 2001 have already been made, though only two remain as professor Darell Fields left after only one year and the School is now searching for a replacement to fill out the final of the originally promised thr ee positions. The Director's Spreadsheet calls for three mor e positions (on top the current search being run in 2005-06) to come on line in rapid succession (two searches in 2006-07, and another in 2007-08).

The program has already had great success in full-time faculty hiring, with the addition in recent years of Peter Wiederspahn (now tenured), an awar d winning teacher (Penn State Teaching Award), award-winning designer (BSA Un-built Architects Award, and active scholar (writings on Charreau, and Housing). Wiederspahn replaced 5-time P A Award winner Monica Ponce de Leon of *Office dA* (who was hired away by Harvard GSD, and has since received tenure there). Since the last NAAB visit in 2002, T im Love has also been hired, in design and theory, and has been an outstanding teacher, while running an enormously successful new practice (already 20 people), and providing important critical leadership in the School. Mo Zell, an excellent young designer, and gifted draftsperson is also now halfway through her probationary period as a tenur e-track faculty member. But as the School sear ches for another strong person in either building systems and design, or computing and design, ther e remain a number of areas that need help. Building Systems, Computing, Technology, and an additional historian are critical needs.

The existing faculty is very committed to the mission of the School, and are a great complement the remaining tenured faculty that includes Director Geor ge Thrush and eminent historians Elizabeth Cromley (whose most recent book, An Invitation to Vernacular Architecture, was published in 2005, by the University of T ennessee press) and Mardges Bacon (whose important book on William Jor dy in America was published by Yale University Press in 2005). The School continues to take advantage of the excellent Part-time faculty in a city like Boston, but they need mor e access to r esearch and teaching support.

The lecture series has continued to grow, and present a public face to the mission of the school by virtue of its choices. On the other hand, Exhibitions have been mounted in Ryder Hall cases but lack adequate space for lar ger work,and also lack security, and any professional mounting help. The Ruggles Studio Space has been a great hit since its opening in fall, 2000, and will see a massive expansion opening in January 2006. In other areas, such as administrative staff support, web design and maintenance, much progress has been made. But as the School has gr own, the demand continues to outpace these advances, and much mor e needs to be done, but the distance travelled in just a few years is evidence of the University's commitment to Architecture.

In 2004, the School hired a full-time co-op coordinator and this has been a great boon to the co-op program, which now boasts a 100% placement rate for the first time in its



history. This a great step since 2002. Outreach oppor tunities rely on outreach tools, and a color program brochure ar e already in place, though not yet adequately funded. An alumni newsletter would go a long way toward keeping better recor ds of alumni activity, but also keeping open possibilities for development. Additional discretionary budget is the clear solution here.

Programs strengths and future directions

The greatest strength of the architectur e program at Northeastern is the fit between its urban focus and the City of Boston. There are many oppor tunities for new ideas and strategies to occur in this environment. More specifically, however, are the following:

1. Architecture taught within a comprehensive university
2. Accomplished faculty
3. Outstanding part-time faculty on which to draw
4. Associations with top area professional firms
5. Related disciplines within University share the urban focus
6. Well recognized within professional and academic community
7. Students known to local pr ofession through co-op

Since 2002, **Northeastern Architecture has achieved some very specific goals:**

1. Expand Ruggles Studio facility to accommodate larger student numbers
Done January 2006
2. Fill Administrative staff position dedicated to ar chitecture
Done Summer 2003
3. Architecture to become separate academic unit, with Chair salary
Done winter 2002
4. Architecture becomes a School
Done Spring 2005
5. Add sufficient departmental office space to support program
Done Summer 2003
6. Establish and maintain web site to disseminate research and program
Done fall 2000
Completely Re-Done by Educational Technology Center, Phase 1, **Done** Summer 2005
7. Increase Lecture and Exhibition budget to competitive level
Lecture Budget OK **Done** fall 2001
Exhibition Budget Proposed, 2004-05, **Pending**
8. Re-design curriculum to move from Quarters to Semesters **Done** fall 2000
9. Increase quality of student craft **Semester Curriculum** fall 2003
10. Raise Library holdings in Architecture (and UD) to 5000 **Expected** fall, 2002
11.Development work by Chair for endowed Chairs and outreach programs **TO DO**

3.3 Public Information

Urban Architecture Program Brochure (copy attached as per 2000 NAAB VTR rec.)

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 incr easingly rapid technological and social change, architects must find ways to forge 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 formal and political ideas in cities, and the role of technology in contemporary ar chitecture and design thinking. Because the process of designing buildings is one that involves synthesis of disparate factors, it can also translate into strategies for approaching a wide range of other problems not traditionally understood to be "ar chitecture". At Northeastern we connect specific problem-solving inher ent to architectural understanding with the larger context of contemporary cities.

The curriculum teaches students to conceptualize, synthesize, and represent complex architectural and urban issues. The program offers a commitment to teaching cor e skills and critical thinking as preparation for both professional practice and advanced study. The cur riculum in the design studio encompasses two major themes: first, the studio pr ojects focus on the art of building, and secondly, the projects explore how buildings can af fect urban conditions. Buildings meet both our individual need for shelter and our shared need for cultural meaning. The art of building includes the study of building construction and technology, as well as the cultural messages created by the expression of material, structure, and form in architecture. 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 af forded by co-op to develop core professional skills, the curriculum can focus on architecture's fundamental aesthetic, technological, social, and political aspects.

With the ef fective synthesis of the ar t of building with urban issues, Nor theastern's program in Architecture is becoming a leader in identifying opportunities for civic representation, urban development, and neighbor hood design. Northeastern's students are in great demand in area offices because of their combination of professional competence and fluency in urban architectural issues. Because Northeastern's program is of fered in the context of a university , there are great opportunities for inter-disciplinary cooperation in urban-oriented research and cr eative work in areas such as G.I.S. mapping, urban economics and development, race and social division, new for ms of spatial and visual communication, and public policy .

Copies of Student Performance Criteria have been distributed to all Students, since Fall 2001. They also r ead the following in the Pr ogram Brochure (from the 2004-05 edition):

Degrees & NAAB Accreditation

The Northeastern Architecture program has long been a very successful pre-professional program (**B.S. degree, major in architecture**), however, in 2003, the **new M.Arch program was granted "professional accreditation" by the National Architectural Accreditation Board (NAAB)**. This means, M.Arch program graduates will no longer be requir ed to attend graduate school in order to sit for State Licensing Board examinations. Our graduates will be eligible, following apprenticeship programs supervised by the National Council of Ar chitectural Registration Boards (NCARB), to become licensed architects in any state without further education. Since in the Fall of 2001, our graduates have been eligible to enter the one-year program to receive the Master of Architecture (M. Ar ch) degree (after completion of the B.S. Arch).

The following text is what the NAAB r equires that we include in or der to clarify their degr ee and accreditation policies:

Masters degree programs may consist of a pre-pr ofessional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accr edited professional education. However, the pre-professional degree by itself is not recognized as an accredited degree."
"The NAAB grants candidacy status to new programs that have developed viable plans for achieving initial accreditation. Candidacy status indicates that a pr ogram should be accr edited within six years of achieving candidacy, if its plan is pr operly implemented."

3.4 Social Equity

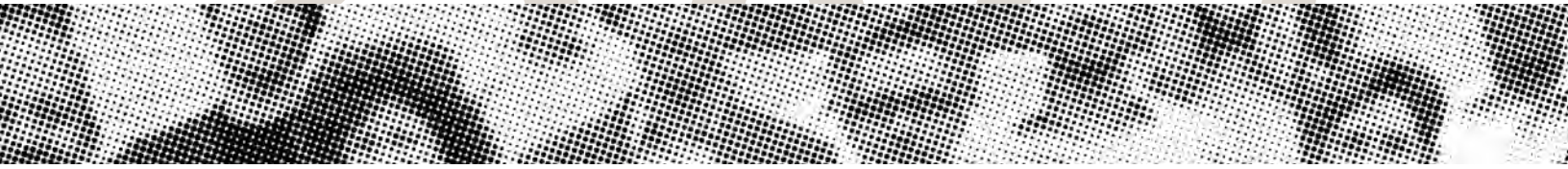
Equal Opportunity Policy
Northeastern University does not discriminate on the basis of race, color , religion, sex, sexual orientation, age, national origin, disability or veteran status in admission to, access to, treatment in or employment in its programs and activities. In addition, Northeastern University will not condone any form of sexual harassment. Handbooks containing the University's nondiscrimination policies and its grievances procedures are available in the Office of Affirmative Action and Diversity, 424 Columbus Place. Inquires regarding the University's nondiscrimination policies may be dir ected to:

Donnie Perkins, Dean/Director
Office of Affirmative Action and Diversity
360 Huntington Avenue, 424CP
Northeastern University
Boston, MA 02115
(617) 373-2133

Inquiries concerning the application of nondiscrimination policies may also be referred to the Regional Director, Office for Civil Rights, U.S. Department of Education, J. W . McCormack Building, Post Office Court House, Room 222, Boston, MA 02109-4557.

Student Support
Northeastern University has a complete range of Student Suppor t Services, from personal counseling, to a myriad of health services on campus, to the Spiritual Life Of fice (and new, award-winning Spiritual Life Center, designed by former NORTHEASTERN faculty member Monica Ponce de Leon), and many student or ganizations. The University has a complete department dedicated to student life, with its own dean, and administrative and professional staff.

Within Northeastern Architecture itself, there is another layer of student support. The program has a co-op education coordinator whose sole function is to help smooth the transition back and forth between work experience and academic life. But at the level of the design studio environment, there are additional ser vices. Full-time faculty members George Thrush, Peter Wiederspahn, Mo Zell, Elizabeth Cr omley, Mardges Bacon, and Tim Love are regularly available for student meetings during of fice hours, and even at their professional offices when necessary. But there is an inherent conflict between having a professionally active design faculty in an urban area, and the more student-centered, non-professional environment that one finds in a mor e rural setting. Faculty are simply not "around the school" at all times, because they work as well as teach. The potential for design excellence in this arrangement is great, but we must also take care that students' needs outside of the classroom are not ignor ed. To this end, the Ruggles studio space has helped a great deal. By af fording a place where multiple studios, at multiple levels can occur simultaneously, students forge more links



with their classmates across academic levels. Also, students will gain greater access to part-time faculty not their own, because they will be in studio at the same times. All of this should serve to foster a more "caring and supportive" envir onment for students. At present architecture students also get academic advising fr om the Olivia Martel, an Academic Advisor in the Of fice of the Dean, in the College of Arts and Sciences.

Demographic diversity

Northeastern University students come from very diverse backgr ounds. The architecture program currently can base this claim only on power ful anecdotal evidence, but the University as a whole keeps outstanding r ecords in this area. Indeed, North eastern has a Dean of Diversity, with a complete support staf f to oversee compliance with this prominent university objective. What follows is the University's policy on diversity and Affirmative Action.

Northeastern University is a comprehensive private institution with appr oximately 24,000 degree students and 4,180 employees. Northeastern'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 believes that its mission can be achieved only if the student body is not limited by economic status, cultural or racial background, geographic origins, gender , age or sexual orientation.

Located on an attractive campus in the hear t of Boston, the university works to main - tain and strengthen its commitment as a friend to the city of Boston, a partner to the Commonwealth of Massachusetts and a neighbor to the cultural districts of Back Bay and Roxbury.

Northeastern University encourages under-represented minorities (African Americans/Blacks, Hispanics/Latinos, Asian/Pacific Islanders and American Indians/Alaskan Natives) to submit their vita/resumes to the Of fice of Affirmative Action and Diversity. Registrants will be informed of administrative employment opportunities in human resources, busine ss administration, finance, accounting, student affairs, residential life, development, infor mation technology, University Relations, governmental affairs, communications, athletics and health ser vices. Registrants seeking faculty and academic positions will receive notice of employment opportunities in the Provost's Office, the Colleges of Arts & Sciences, Business Administration, Engineering, Bouve College of Health Sciences, Computer Science and Criminal Justice and the School of Law .

Northeastern University is an AA/EOE/Title IX Employer committed to strengthening our cultural, ethnic, gender and disability diversity . Applications from candidates who will contribute to our diversity are especially encouraged.

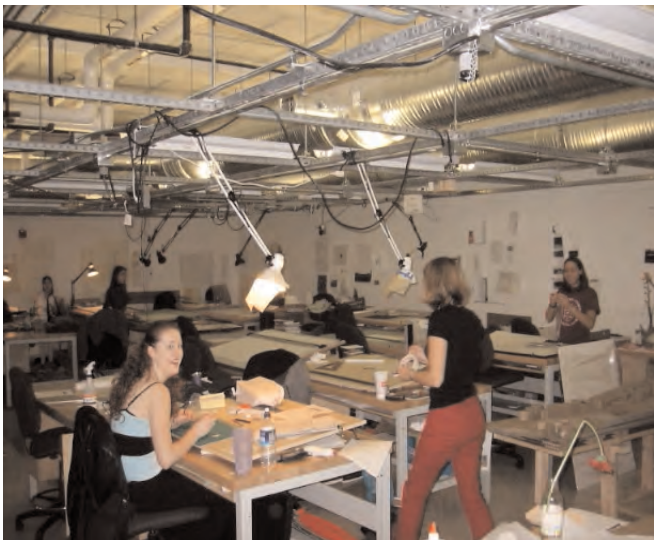
Governance
As described in previous sections, Northeastern Ar chitecture, despite being a small and relatively young program, has systems in place for encouraging participation fr om students (through evaluations and faculty contact), and faculty, (through faculty meetings and discussion with the director), on curricular and policy matters. Since the 2002 NAAB visit two new systems have been str engthened: the External Advisory Board composed of area professionals in design, real estate development and government, and the Student AIAS Chapter, which seeks to bring those voices to the gover - nance discussion as well.

Criteria and Procedures for Equity and Diversity in Faculty Appointments
Northeastern Architecture follows all University guidelines on Diversity and Affirmative Action in hiring and promotion. To date, though the number of faculty appointments has been very small, two of the full-time design studio faculty (Monica Ponce de Leon, Venezuelan and Darell Fields, African-American), and a V isiting Professor in Design (Diego Toledo, Spanish), have qualified as minority candidates, while three of the six full-time faculty in Architecture ar e women. Among the Adjunct faculty are at least six women, three Hispanic and three Asian members. The University Guidelines for all such practices are very thoroughly developed and pr ecisely followed. They can be found at the University website <http://www .aa.neu.edu/policies.html>.

Criteria and Procedures for Equity and Diversity in Student Admissions
Northeastern University admissions oversees all admissions to the ar chitecture program. They follow all equal opportunity, Affirmative Action, and Americans with Disabilities Act guidelines, and ensure that all have access to the University , and by extension, the architecture program as well.

Substantial financial aid packages are of fered at the University, and the Department of Art and Architecture oversees a small endowment from which several small Meserve Scholarships are distributed each year. The current amount of these scholarships is very small (around $2,500- $3,000 annually, depending on market per formance), but the opportunity to raise funds to of fer architecture-based scholarships is something that Northeastern Architecture is very interested in doing.

3.5 Studio Culture
Studio Culture at Northeastern is a recently evolved phenomenon. It has only been sine 2001 that the student body has been af forded dedicated studio space that encourages the mixing of students and faculty of dif ferent levels, and with dif ferent interests. The School often employs studios that have students working in pairs or teams to encourage the salutary aspect of teamwork that is so much a part of archi - tectural practice and the construction industry. However, these experiences are balanced by plenty of individual work as well, as it is crucial to the development of necessary skills in each student (indeed these skills are requir ed by NAAB).



With regard to respect and values, Northeastern instructors are discouraged from employing the kind of gratuitous personal criticism for which architecture schools, unfortunately, have become known. Instead, students are encouraged to make clear arguments for their work, and to present them coherently. As for work habits, the School does its best to encourage rational use of time. The tradition of all night work is frowned upon as an indication of poor planning. This isn't to say it doesn't happen (Studios are open 24 hours), but rather that the School hopes to not allow this to become overly romanticized.

Students feel quite safe, and there is very little theft in the studio, perhaps because there is a Campus Police Sub-Station located at the entrance to the Ruggles Studio, but also surely because students seem to respect one another's belongings reasonably well.

Students are provided with good quality maple work desks, with lockable storage cabinets, and access to electricity, ethernet, and wireless internet hook-ups at their desk. There are facilities for digital output to color plotters, and a laser cutter . Students can fund an output account against which they can draw for plotting throughout the year.

There is currently one, and soon to be two critique spaces available for use at all times, additional critique space can be created with the flexible uni-strut system affixed to the ceiling that allows for panels to be moved anywher e in the studio to create new spaces.

The Fall of 2005 will mark the final semester of the use of Dockser Gymnasium as an overflow location for architecture studios, and withe opening in Januar y 2006 of the expanded Ruggles Studio, architecture students will once again be all in one place.

3.6 Human Resources

Sufficient faculty
Northeastern Architecture currently has approximately 300 full-time students. It has six full-time faculty members, and approximately 15 part-time faculty (FTE) per year . One additional full-time, tenure-track hire is already budgeted for ,and committed to, by the Dean's Office slated to begin teaching in Fall, 2006. **Since the 2002 visit, the commitment to new hires has been met, but the student body has doubled, creating a major new demand for full-time faculty .**

Full-time Faculty:
George Thrush, M. Arch. Director, Associate Professor (tenured in Design)
Introduction to Architecture
Upper Level Design Studios
Advising, Committees, Program Responsibility
Mardges Bacon, Ph. D. Full Professor (tenured in History)
19th and 20th Century Architecture, Seminar in Modern Architecture
Advising, Committees
Elizabeth Cromley, Ph. D. Full Professor (tenured in History)
World Architecture 1 &2, History of the American House
Advising, Committees
Peter Wiederspahn, M. Arch. Associate Professor (tenured in Design)
Design 5, Design 6, Structures 2, Drafting, Design 2
Advising, Committees
Tim Love, M.Arch. Assistant Professor (tenure-track in Design)
Studio 1, Studio 2, Third year Seminar, Housing
Mo Zell, M.Arch. Assistant Professor (tenure-track in Design)
Manual Representation, Upper Level Studio

PLUS

one additional full-time, tenure-track hire budgeted;
to begin in 2006-07 (this position WAS filled by Darell Fields, as a tenured, African-American Associate Professor last year, but he then took a position at the University of Arkansas, which slowed our hiring schedule).

Part-time faculty:
Roberto Viola-Ochoa, (Sasaki, Inc.) Studio 5, Environmental Systems
Dan Anderson, M. Arch., (FOUR Architecture), Project Case Studies 1 & 2
Randa Ghattas, M. Arch., (Seitz Architects), Manual Representation
Marc Roehrle, M.Arch. Manual Representation
Andrew Grote, M.Arch. (Ann Beha Architects) Manual Representation
Sarah Roszler, M.Arch.(Utile, Inc.) Manual Representation
Michael LeBlanc, M. Arch., (Utile, Inc.), Housing Studio
Michael Price, M.Arch. (Schwartz-Silver Architects) Studio 2
Anya Bokov, M.A.U.D. (Herzog & de Meuron; City of Somerville)

Graduate Thesis Studio
Benjamin Bolger, Ph. D., 19th Century Architecture and Urbanism, American Housing
Christina Crawford, M.Arch. (Utile, Inc.), 20th Century Ar chitecture and Urbanism
Andrew Cruse, M.Arch. (Machado & Silvetti Assoc.), Integrated Building Systems
Chris Genter,. M.Arch. (Utile, Inc.) Studio 1, Digital Representation
Chris Grimley, M.Arch. (Machado & Silvetti Asssoc.), Digital Repr esentation, Advanced Representation
John Hong, M.Arch. (Single Speed Design), Studio 2
Eric Howeler, M.Arch. (Meejin Yoon & Eric Howeler) Digital Representation
Derek Johnson, M.Arch. (Machado & Silvetti Assoc.), Studio 1
Matt LaRue, M.Arch. (Jonathan Levi Architects), Studio 5
Lucy Maulsby, Ph. D., Seminar in Modern Archite cture
Robert Miklos, FAIA, (Partner, Ann Beha Architects), Studio 1
Juan Paniagua, MS Eng., Structures 1
Steve Poon, M.Arch. (Machado & Silvetti Asssoc.), Digital Representation
Luis Valenzuela, M. Des., Graduate Thesis Studio
Milda Richardson, Ph. D., World Architecture 2, American Housing

Administrative Head

The Administrative Head of Architecture is George Thr ush, Director of the School of Architecture. He is responsible for all curricular development, hiring, course management, assembling the lecture series, coordinating architecture exhibits, and public outreach.

Administrative and Technical support staff

Since the 2002 Visit, a dedicated administrative support staf f person has been hired on a full-time basis. There is however, no technical support for the architecture program; instead, computers are maintained by the Department of V isual Art's staff of two full-time technicians, whose main focus is on graphic design and multimedia student needs. Moreover, there is an enormous demand for an Associate Director for the program, who can actually take significant management responsibility from the Director , and free him up to enhance the r esearch and outreach efforts at the School.

Faculty support staff

There is no dedicated faculty support staf f. The Director of the School of Architecture has one administrative assistant who does all the School' s secretarial work. More administrative and support help is desperately needed. That assistant super vises co-op students and/or work study students who answer the departmental telephone. The slide library is maintained and supervised by a full-time librarian (under the supervi - sion of the Department of V isual Arts).

Admission and yield data

Freshman, Fall 2005

Architecture Freshman Admissions Fall 2005:
Accept ratio = 26.2%;
Yield ratio = 27.9%

College of A&S Freshman Admissions Fall 2005:
Accept ratio = 46.6%;
Yield ratio = 21.1%

University Freshman Admissions Fall 2005:
Accept ratio = 47.0%;
Yield ratio = 24.4%

Transfers, Fall 2005

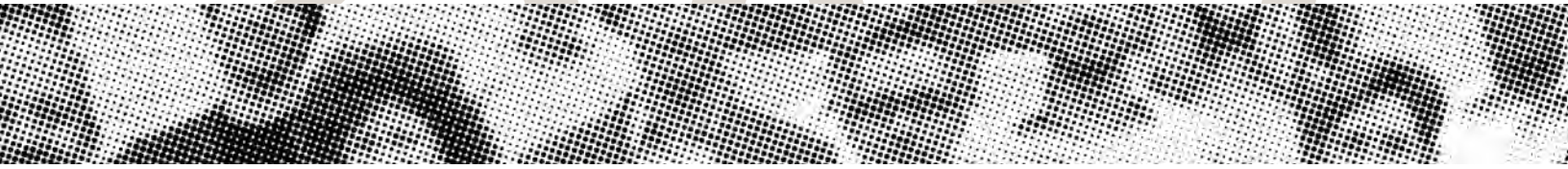
Architecture Transfer Admissions Fall 2005:
Accept ratio = 42.3%
Yield ratio = 63.6%

College of A&S Transfer Admissions Fall 2005:
Accept ratio = 77.2%
Yield ratio = 48.3%

University Transfer Admissions Fall 2005:
Accept ratio = 50.7%;
Yield ratio = 51.2%

Northeastern's students come from the Massachusetts area (30%), the mid-Atlantic States (30%), and the rest of the United States and Internationally (40%). This year's incoming class has average SAT scores of 1265, with a 3.68 GPA. We do not have strong retention figures since the last NAAB visit, however, we estimate that our attrition rate is about 20% over the course of a 5 yr. undergraduate career, though another 10-15% join the program as transfers. Student/ Faculty rations for studios average as follows: 1st yr. 17:1, 2nd yr. 15:1, 3rd yr. and beyond, 13:1.

Faculty workloads are divided as follows:
Teaching: 30%, Research: 45%, Service: 25%. These are the figures sued in the annual merit evaluations. A variable loading policy is currently under review, whereby different faculty would be evaluated against different percentages depending on their expertise and skill.



Director: 75% of time on administrative matters, 15% teaching, 10% research.

Office Manager: 50% hiring and personnel, 30% events coor dination, 20% work-study management

Co-op Coordinator: 80% job placement and student assistance, 20% teaching

Slide Librarian: 70% collection management, 30% staf f management

Significant Problems:
1. Need an Associate Dir ector to help with hiring and student ser vices
2. An IT person to manage web and digital output
3. Need additional tenure track faculty and of fice space to house them.

3.7 Human Resource Development

The Architecture Program falls under Northeastern University's Human Resource Development policies. Northeastern is committed to achieving a national profile in research, scholarship, and creative activity. To this end the University maintains a sabbatical program on a seven-year cycle for tenured faculty; holds an annual competition for in-house grants in three areas -- faculty development, instructional development, and research initiatives; provides each faculty member with possibility of using $1400.00 annually for travel to conferences or other faculty development ef forts; and runs classes throughout the year for faculty to upgrade computer skills. In addition, Northeastern has a research office to assist faculty in identifying grant opportunities for research support and preparing proposals.

Northeastern Architecture Lectures since 2002:
D. Blake Middleton, AIA, Partner, Handel Architects, New York, 2002
Michael Grant, AIA, Principal GRANTStudio, Boston, 2002
Kyu Sung Woo, FAIA & William Rawn, FAIA, Boston, 2002
Lawrence Vale, Ph. D., MIT, 2003
Conference: The New Geography of Urban Design, 2003
Michelle Addington, Ph. D., Harvard University, 2003
George Blacklock, Painter, London, 2003
Tom Fisher, FAIA, Dean, University of Minnesota, 2003
Monica Ponce de Leon, Office dA, Boston, 2003
David Neilson, Urban Designer, Boston, 2003
Marleen Davis, Dean, University of Tennessee, 2003
Gabriel Feld, Architect, RISD, Providence, RI, 2003
Ann Beha, FAIA & Robert Miklos, FAIA, Architects, Boston, 2004
Carlos Zapata, Architect, New York, 2004
Conference: Urban Housing and the Legacy of Modernism:
Europe and America, 2004
Hansey Better & Anthony Piermarini, Architects, Boston, 2004
Steve Luoni, Architect, University of Arkansas, 2004
Ken Greenberg, Urban Designer, Toronto, 2004
Joseph Tanney, Architect, New York, 2004
John Hong & Jinhee Park, Architects, Cambridge, 2004
Eric Mumford, Ph. D., Historian, Washington University in St. Louis, 2005
Antoine Picon, Historian, Harvard University, 2005
Joan Busquets, Urban Designer, Barcelona, 2005
Paul Lewis, Architect, New York, 2005
Conference: Density 2, with the Boston Society of Architects, 2005

Visiting Design Studio Review Critics (selected list):
Nick Winton, Anmahian Winton Architects, Boston 1997-2005
Monica Ponce de Leon, Architect, Office dA, Boston, 1994-2005
Richard Sommer, Associate Professor, Harvard University, 1998-2005
Maryann Thompson, Thompson & Rose Architects, Cambridge, 1996-2005

Alex Krieger, Architect and Urban Designer, Harvard University, 1995-2005
Ellen Dunham-Jones, Associate Professor, MIT, 1995-2005
Rodolfo Machado, Architect, Boston, 1996-2005
David Hacin, Architect, Hacin Associates, Boston, 1994-2005
Warren Schwartz, Schwartz Silver Architects, Boston, 1993-2005
Andrea Leers, Leers Weinzapfel Architects, Boston, 1993-2005
Nader Tehrani, Office dA, Boston, 1993-2005
Margaret Crawford, Harvard University, Cambridge, 2000-2005
William Rawn, Architect, Boston, 1999-2005

Note: Public exhibitions brought to the campus must be small because the School has showcases but not a full gallery.

Northeastern Architecture Exhibitions since 2002:
Handel Architects, New York, 2002
GRANTStudio, Boston, 2002
NAAB Student Exhibition, 2002
Northeastern University and the New West Campus, 2003
George Blacklock, London, Paintings, 2003
Urban Thesis Projects, 2003
"Illuminations" , Mo Zell, 2003
"Mapping and Understanding", David Neilson, 2003
Wood + Zapata Architects, 2004
Studio LUZ, Boston, 2004
Arkansas Community Design Center, 2004
Resolution4Architecture, new York, 2004
Single Speed Design, Cambridge, 2004
Women in Design (AIA traveling Exhibition), 2005
Lewis, Tsurumaki, Lewis Architects, new York, 2005
Graduate Thesis Projects, 2005

Student Support (advising and co-op)
Student Support services available to Northeastern students include: The Dean's Advisors who serve all students in the College of Arts and Sciences, advising them of College requirements and progress toward graduation; the academic advisors -- School of Architecture faculty members assigned to advise groups of students; the Co-op Coordinator, who locates co-op jobs for students appropriate to their skill and education level and helps integrate workplace and academic learning; and the Counselling Center for personal counselling. In addition where applicable, students have financial aid advisors, athletic program advisors, and study-abroad advisors.

Field trips
Student opportunities to participate in off-campus activities occur at several scales. Within the School, there is a student AIAS. Individual classes take students on field trips to local monuments such as Henry Hobson Richardson's Trinity Church, to nearby monuments such as Frank Lloyd Wright's Zimmerman House in Manchester, NH, or

Walter Gropius's house in Lincoln, MA. The Study Abroad program takes numerous architecture students to study in Italy in the Fall or Spring of their Middler year at Northeastern.

Student and Professional Societies

In addition to the AIAS, there are many student clubs on campus including sororities and fraternities and religious groups. The Honors Program at Northeastern is available to students who earn at least a 3.25 GPA, and several of our students are members of this group.

Tenure and Promotion

Some of the policies for appointment, promotion, and tenure are University-wide, and others are School-based. The School's Policies for Tenure and Promotion are shown below; these are approved by the Provost's Office. The Administrative and Faculty Handbooks of the University, currently under revision, contain other regulations regarding appointments, tenure, etc., which we will supply on request.

The T&P process is based on basic standards and procedures however, and they will be briefly outlined here. Upon hiring, all new tenure track faculty are asked to produce a research plan, which outlines for both the faculty member and the School's Director what strategies the probationary faculty member will employ to achieve tenure. The criteria for tenure within the College of Arts and Sciences, and the University as a whole are that the candidate must achieve a "national profile" through "peer reviewed" scholarly or creative work. This peer review may come in the form of national design competitions, juried exhibitions, refereed papers, published design work, etc. The acceptable work is shown below:

a. Creative productivity such as architecture, urban design and other work evidenced in portfolio or electronic presentations.

b. Participation in exhibitions and competitions.

c. Original research and scholarly review, either published or otherwise disseminated: 1)submission of articles, monographs, and books [either published or manuscripts submitted for publication]; 2) refereed papers presented and contributions made to panel discussions at professional meetings; 3) book reviews written by the candidate; 4) research and writing in progress; 5) written proposals; 6) documented professional lectures.

d. Curatorial responsibilities consisting of originating exhibitions; writing explanatory texts, brochures, and catalogues; traveling exhibitions.

e. Recognition in the faculty member's scholarly and/or creative field, as well as contributions to pedagogical

and/or methodological issues. Evidence of this may be demonstrated in reviews by others of the candidates' books, scholarly publications, creative work; evidence of the candidate's work being cited in scholarly works or in exhibition reviews; grants awarded.

Candidates are encouraged to present work of sole authorship and/or active leadership in group projects. In the case of collaborative work, it is imperative that a candidate identify his/her specific contribution as well as that of any collaborator or collaborators.

The probationary faculty member receives the guidance of the School's Director (and often another senior faculty member as well) as a formal mentor. There are regularly scheduled mentor/ mentee events sponsored by the Provost's Office in order to keep all parties apprised of current standards and procedures.

The candidate has a formal, external review after the Third Year, and the Tenure review occurs in the Sixth. Both involve the solicitation by the School's T&P Committee of external reviewers. Half of the list of *potential* referees are selected by the candidate, and half are selected by the Committee. The final group for both the Third-year review and the Tenure Review is completely the selection of the T&P Committee.

The decision of the School's T&P Committee is recorded for the record, and a formal letter from the Director is also added to the materials sent forward to the Dean of the College of Arts and Sciences and the College T&P Committee. Their decisions are then forwarded to the Provost, President, and Board of Trustees for final disposition. There is a formal appeals process for the tenure process. For promotion the Full Professor, the process is nearly identical, but for the appeals process.

Faculty Research (2002-2005)
The faculty's research record shows their active participation in several research topics of current interest in the Architecture field; the following list provides some evidence of this activity among the full-time faculty:

Publications
•Invitation to Vernacular Architecture; (co-authored with Thomas Carter); University of Tennessee Press, 2005, Elizabeth Cromley
• "Domestic Space Transformed, 1850-2000", in, Architectures Modernism and After; Blackwell, 2004, Elizabeth Cromley
• "At Home on Astor Street: Uses of Interior Space at the Charnley House"; in, The Charnley House; Richard Longstreth, ed.; University of Chicago, 2004, Elizabeth Cromley
• "New Domesticities," chapter in NewDirections in Architectural History, ed. Andrew Ballantyne, Blackwell Publishers, UK, 2003, Elizabeth Cromley
• "Symbolic Essence": Essays on Modern Architecture and American Culture, William Jordy, Yale University Press, 2004, Mardges Bacon

Mardges Bacon, Editor and Author of the Introduction
• The Radiant City on Tour: Le Corbusier at Bowdoin", Mardges Bacon, Bowdoin College, March, 2004
• "The Skyscraper and the American City", Mardges Bacon, University of Massachusetts/ Boston, April 2004
• "Modernism and Vernacular at the Museum of Modern Art, New York"
Mardges Bacon in Maiken Umbach and Bernd Hüppauf, eds. Vernacular Modernism: Heimat, Globalization, and the Built Environment, Palo Alto, Stanford University Press, 2004
• "Double Loaded", Timothy Love, Harvard Design Magazine, Fall 2004-Winter 2005 Issue
• "Kit-of-Parts Conceptualism: Abstracting Architecture in the American Academy", Harvard Design magazine, Fall 2003/Winter2004 Issue.
• 2003 ACSA National Conference: Recalibrating Centers and Margins. University of Kentucky. Paper nominated from Beginning Design Conference 2002 as one of the 6 best papers from the conference to be presented at the ACSA National Conference. Paper title: "The Design Process: Charcoal Drawings, the qualitative representation" Mo Zell
• 2003 National Beginning Design Conference. UnStaked Boundaries, Oklahoma State University. Paper accepted entitled: "The Case Study as a Means of (Re)presentation within a Manual and Digital Representation Course", Mo Zell
• Journal of Architectural Education, Transparency, Spring 2003. Design accepted for publication in the special issue on Transparency. "Garage + Workshop: Revisiting the Vernacular Shed", proof sheet approved, publication upcoming, Mo Zell
• 2003 ACSA International Conference. Contribution and Confusion: Architecture and the Influence of other fields of inquiry, Helsinki, Finland. Paper submitted entitled: "Urban scenography – how city and building are connected", Mo Zell
• 2004 International Making Cities Livable Conference. 40th International Conference on Building Cities for Community and Identity. London, UK. June 13-17, 2004. Paper accepted and presented entitled "Borrowed space in the modern medieval city – using figure-ground and perspective view", Mo Zell

<u>Exhibitions Curated</u>
Handel Architects, New York, 2002, George Thrush
GRANTStudio, Boston, 2002, George Thrush
NAAB Student Exhibition, 2002, Mo Zell
Northeastern University and the New West Campus, 2003, George Thrush
George Blacklock, London, Paintings, 2003, George Thrush
Urban Thesis Projects, 2003, George Thrush
"Illuminations" , Mo Zell, 2003, Mo Zell
"Mapping and Understanding", David Neilson, 2003, Peter Wiederspahn
Wood + Zapata Architects, 2004, Peter Wiederspahn
Studio LUZ, Boston, 2004, George Thrush
Arkansas Community Design Center, 2004, George Thrush
Resolution4Architecture, New York, 2004, George Thrush
Single Speed Design, Cambridge, 2004, George Thrush
Lewis, Tsurumaki, Lewis Architects, New York, 2005, George Thrush
Graduate Thesis Projects, 2005, George Thrush

Presentations at professional Meetings and Universities
• "How Deep is the Ocean", at Urban Housing and the Legacy of Modernism: Europe and America, April 2004, George Thrush
• "Thinking Public in a Private Age", XV Bienial de Archtectura de Quito Colegio de Architectos de Ecuador, October, 2004, George Thrush

Grants Received
• Housing Research Grant, Boston Society of Architects, $9,600, Peter Wiederspahn
• Urban Design Planning Grant, Commonwealth of Massachusetts, $43,000, Timothy Love
• Urban Mapping Grant, Provost's Research and Development Fund, $10,000, Mo Zell
• "Housing Policy and Design", Provost's Research and Development Fund, $10,000, Timothy Love
• "Green Building Case Studies", Massachusetts technology Collaborative, $70,000 (recurring annually), Dan Anderson
• Travel Grant, The Whiting Foundation, $5,400, Mardges Bacon
• Research Grant, Provost's Research & Scholarship Development Fund, $12,000, Mardges Bacon

Presentations at Professional Organizations
• "Density and the City: The Next Layer", AIA Conference, "Density: Myth and Reality" Boston, September, 2003, George Thrush
• "LEEDS and the Market Economy", Massport, Timothy Love, 2004
• Responder on Housing Issues and Urban Design, "Density 2",

Other Forms of Scholarship
1. Mardges Bacon
Conceived, Hosted and presented Introduction to major Housing Conference at Northeastern in April, 2004. "Urban Housing and the Legacy of Moder nism: Europe and America".

2. Peter Wiederspahn
Declaring Victory: Practicing and Teaching; Invited Panelist on ARCHITECTUREBOSTON magazine panel discussion, Sept/ Oct. Issue, 2003

3. George Thrush
Presented Introduction to second day of "Urban Housing and the Legacy of Modernism: Europe and America".

4. George Thrush
Published Op-Ed in Boston Globe on significance of Architecture and Urban Design Choices at Harvard University

5. George Thrush

Reviewed Dana Cuff's book, The Provisional City, for the Journal of the Society of Architectural Historians, Spring 2004

6. Elizabeth Cromley
Subject of NU Alumni Magazine research profile

7. George Thrush
Interviewed design guru of Boston's Big Dig, Fred Salvucci, for ARCHITECTURE BOSTON magazine, Spring 2004

8. Elizabeth Cromley
National Book Review Editor, Journal of the Society of Architectural Historians

Evidence of maintenance of current knowledge and licensure
Many members of both the full-time and part-time faculty are active practitioners whose work is being built, written about, and is winning awards. The following projects represent some of these (Thrush, Love, and W iederspahn are all licensed architects, as are many of the adjunct faculty):

1. Peter Wiederspahn, Architectural Commission
Gordon Residence/ 1000 sf addition/ $125k/ Usonia, NY

2. Peter Wiederspahn, Architectural Commission
Lucas Residence/ 4700 sf Loft/ $650k/ Chicago, IL

3. Peter Wiederspahn, Architectural Commission
Chan/ Palay Residence/ 5000 sf New construction/ $1.5 million/ Concord, MA

4. Timothy Love, Planning Advisor
Isabella Stewart Gardner Master Plan – Phase II, Boston, MA, Principal-in-charge, Utile, Inc. The second phase of a master plan that was started by Love when he was a V ice President at Machado and Silvetti.

5. Timothy Love, Planning/ Urban Design Advisor
Massachusetts Port Authority (Massport) Design Review, Boston, MA, Principal-in-charge, Utile, Inc. Love is leading a team of consultants that will conduct the design reviews for all architectural, landscape, and urban design projects on Massport land (except for the airport).

6. Timothy Love, Architectural Award
The Allston Public Library, primarily design by Love while at Machado and Silvetti Associates, received the Boston Society of Ar chitects' (BSA) Harelston Parker Award for the best building in the city of Boston for 2003.

7. Timothy Love, Architectural Award
Love was nominated by the BSA for the National Y oung Architects Citation.

8. George Thrush, elevated to Fellowship in national AIA.

The Existing Ruggles MBTA Design Studios (2001), site of major expansion (2006)

3.8 Physical Resources

Dedicated Studio Space

With the rapid expansion of the School of Architecture, studio space has been a major evolving need. Senior administration has been responsive to this need in a very dif fi-cult environment for space on a tight urban campus. It will remain at a premium, but through a stop-gap temporary studio in a gymnasium and the commitment to add approximately 7,000 sf of permanent additional studio space, the most central issue with regard to physical resour ces seems to have been addressed.

There are several other examples of physical r esources, of course, that will demand continued attention. While the new studio addition will include a special r oom for digital output (incl. the laser cutter), ther e is still no model shop. The digital studios are soon to be supplemented with an awar d-winning "on-demand" software system that will allow students add faculty access to all architecture related softwar e in real time whether they ar e in a classroom with a wireless connection and a pr ojector; a dorm room, an apartment; or or the design studio. Implementation is to begin in January 2006.

Since the addition of the new dedicated Ruggles MBT A Architecture Studio, each stu-dent from Manual Representation (in the Fall of the freshman year) onwar d, has their own desk dedicated for their use throughout the term (sometimes a desk is shared in the freshman year with one other student).

Lecture and Seminar Space

Lectures and seminars are scheduled in Ryder Hall and Shillman Hall. R yder is home to the School of Architecture, but it is also a general classroom building for the College of Arts and Sciences. Though most classes can meet in appropriate spaces in Ryder , there remain problems for lar ge Architectural History lectures, which demand room-darkening shades, and good projection lines. Ryder is a rehabilitated war ehouse building, and its heavy timber construction often means columns in the middle of classrooms. Improved slide-showing facilities are sometimes available in Shillman Hall.

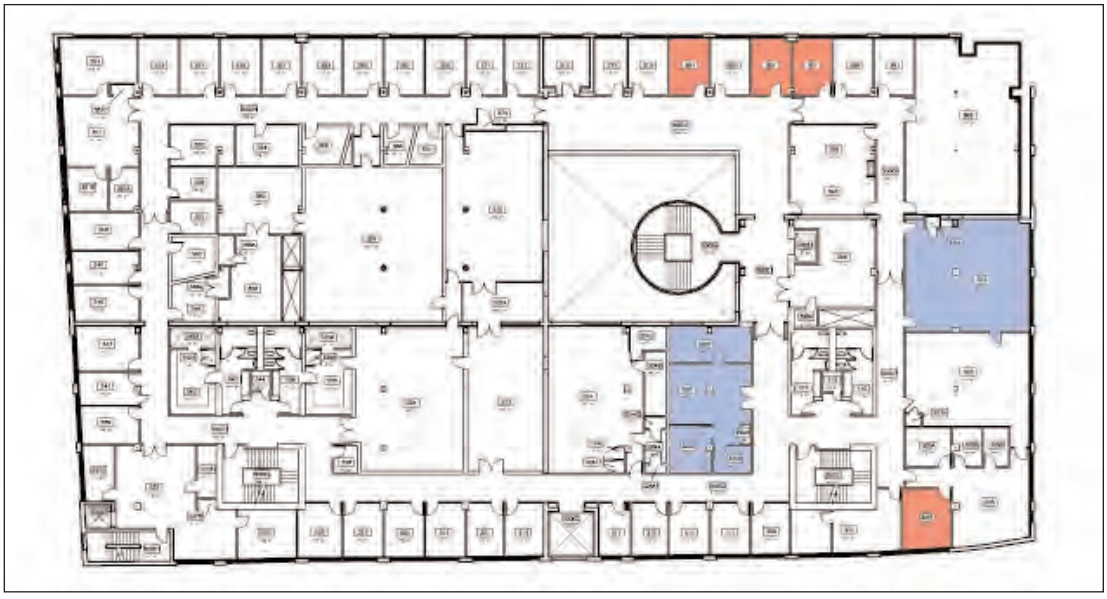
Faculty Office Space

Faculty offices are small but adequate in Ryder Hall (approx. 120 sf. on average). However, there are currently insufficient offices even for planned hir es, let alone additional staff and other requir ed new faculty. The School's Administrative suite (built in 2002) serves the Director, one administrative person, the co-op coordinator, and a faculty member. But with at least one, and as many as four faculty hir es on the near horizon, and additional staff hires urgently needed, there is a dire need to have of fice space to house them.

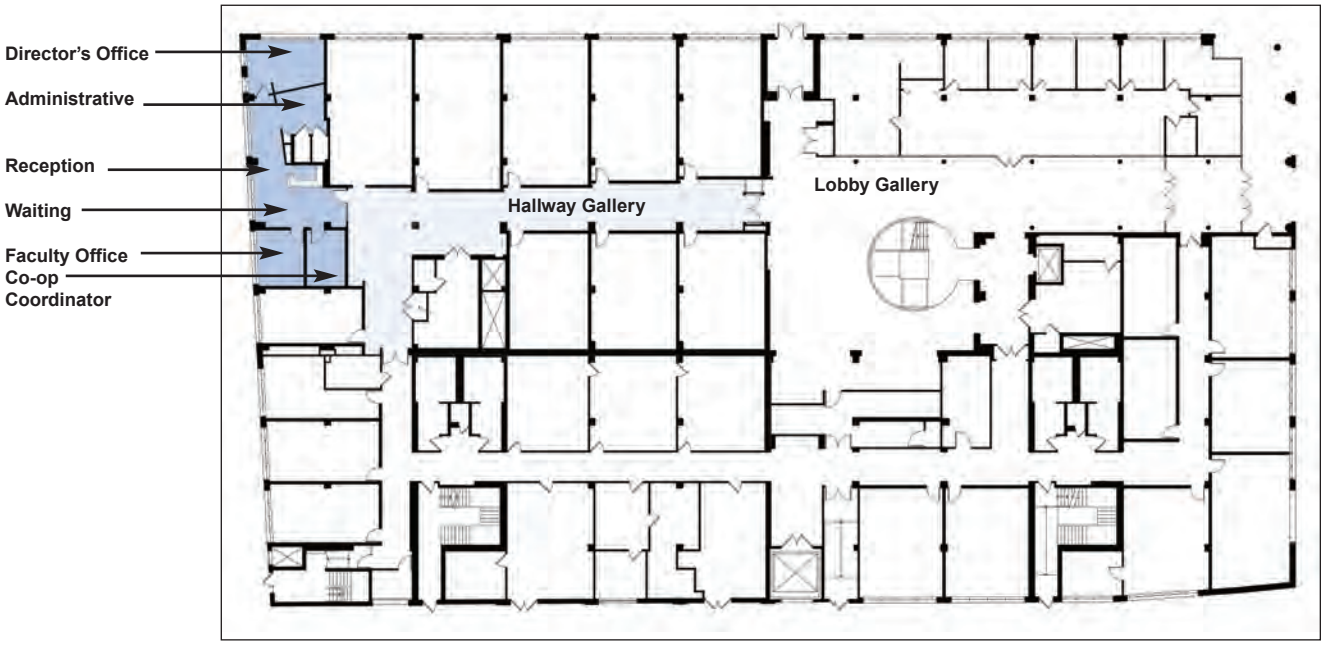
Related Institutional Support Space

In addition to office space, the program currently has use of a slide library (see above in BLUE), and a PC based CAD Lab. With the addition of the digital output room in the Ruggles Studio Expansion, that need expr essed in the previous 2002 VTR has been met, but the need for a wood shop and a CAD/CAM modeling machine r emains.

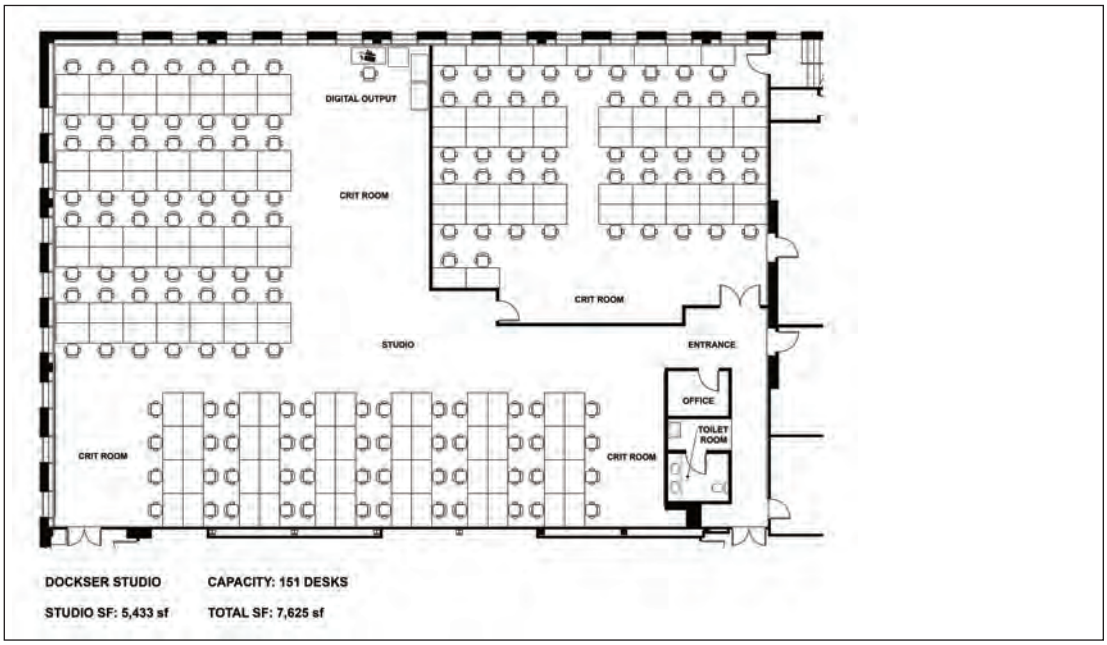
General Description, including labeled 8 1/2" x 11" plans of all spaces
(see Appendix G)



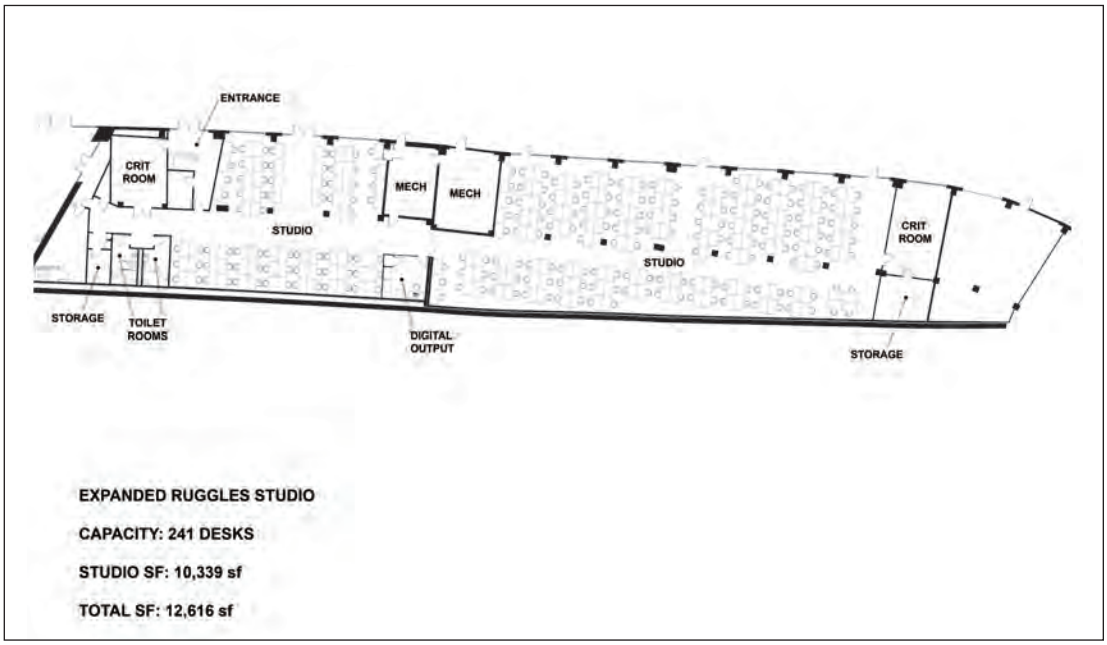
Existing Architecture Faculty Offices on 3rd Floor of Ryder Hall (in RED), and SLide Library and IBM PC Lab (in BLUE)



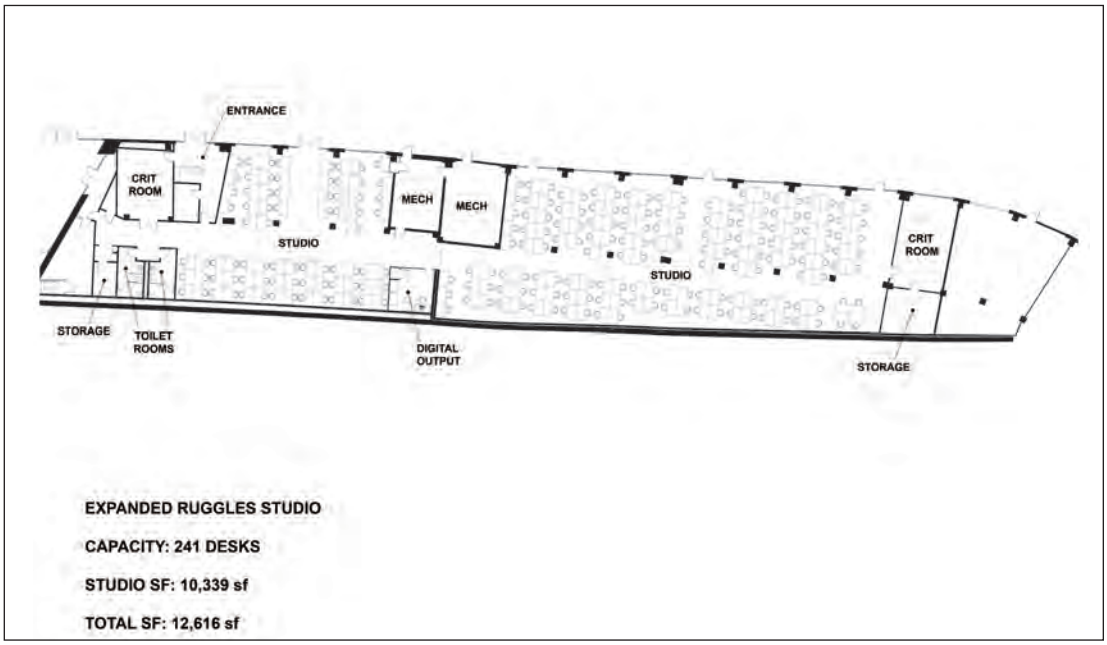
New Architecture Administrative Suite (2002), Hallway Gallery, and Lobby Gallery in Ryder Hall



Current Temporary Design Studio Annex in Dockser Hall Gymnasium (thr ough Fall 2005)



Existing Ruggles MBTA Studio (through Fall 2005)



Expanded Ruggles MBTA Studio (Opening Spring 2006)

3.9 Information Resources

Northeastern University Libraries

Library Resources Evaluation for B.S. Major in Architecture & Master of Architecture
Roxanne Palmatier, Architecture Liaison/Collection Manager
Will Wakeling, Collection Development Officer
September 4, 2005

1. Overall Library expenditure

For 2004/2005 the University Libraries budget totaled $9.9M, comprising approximately $4.3M for staff salaries and $4.9 M for information materials with the remainder for operating costs. Additional sums are frequently available from University funds for the purchase of equipment, furniture, etc..

Periodic satisfaction surveys, for instance, LibQUAL+ and a part of the NEASC institutional accreditation process, provide feedback on the adequacy of Library services and resources. In the context of its annual budget request, the Library supplies comparative data on library-related spending for sets of comparator institutions, including its fellow members of the Boston Library Consortium and relevant Carnegie Research classifications. The Library is currently working on a comprehensive collection assessment project to evaluate collection strengths and shortcomings in the context of current research and instruction needs of the University.

2. Library Staffing and Services

Northeastern University Libraries provide the College of Arts and Sciences with numerous services through library professional and support staff. The staff comprises 41 FTE professional librarians and 48 FTE support staff, as well as a corps of co-op and student assistants. All librarians have masters in library/information science, and many have advanced subject degrees. The librarians selecting resources for the College have on average twelve years of professional experience at Northeastern, are professionally active, and have wide knowledge of the local academic environment and departmental curriculum needs.

A librarian from the Research and Instruction Services Department has responsibility for oversight and development of the architecture collection and serves as Collection Manager and liaison to the School. She works with other Collection Managers to ensure that appropriate materials are selected, especially in interdisciplinary areas. She maintains contact with the School, solicits requests for books, journals, electronic products and library instruction, and enters into dialogue with the College and School over major purchasing decisions and aspects of e.g. the acquisition and licensing of electronic products, such as the benefits and disadvantages of purchase v. leasing and

the importance of maintaining access to back files.

Library Instruction is available upon request to classes and to individuals in the for m of one-on-one research consultations. The library's infor mation literacy program is heavily integrated into the University's overall instructional programs. Instruction may be customized to fit the needs of a par ticular class or seminar, and the library also offers drop-in workshops on various topics, highligh ting the use of electronic information resources.

Traditional reference service, provided by professional librarians, is available 78 hours a week at the Snell Librar y Reference Desk. This includes telephone reference assis - tance during all desk hours. Reference assistance is also available through the Library' s web site (http://www.lib.neu.edu/). The Library is part of a national cooperative sup- porting 24/7 live reference chat; user questions may also be dir ected to the Library's "Ask a Reference Librarian" web mail box.

Support of distance learners is now part of the Librar y's suite of reference services. In addition to supporting distance education with a web resource page, Research and Instruction Services librarians have created an awar d winning online research tutorial http://www.lib.neu.edu/online_research/help/online_tutorials/. Dramatic increases in the numbers of electronic journal subscriptions enable users to access the jour nal liter- ature from homes, offices, labs, and studios.

Snell Library maintains well-used class Reser ve collections. Increasingly, journal articles are available to users in electronic for mat, thus enabling faculty members to create links to required readings in their Blackboard course pages.

Interlibrary Loan services, including ILLIAD and NExpress, pr ovide researchers with access to materials delivered from other libraries upon request. In addition, Northeastern University is a member of the Boston Library Consortium, an association comprising 18 of the major research libraries in the Greater Boston ar ea. All currently registered students, faculty and staff have use and borrowing privileges at the other member libraries.

Snell Library contains an Infocommons (containing 160 workstations) and two addi- tional computer labs for student use, providing access to all campus networked appli- cations. There are also computers in public areas for Internet use to facilitate sear ch- ing of the library's licensed resources and catalogs.

During class sessions, general collections are available 101 hours a week, and comput- er lab and study areas 144 hours a week. Round-the-clock, 24-hour access to study areas and computer labs is available. Hours for all services are extended fur ther dur- ing exam periods.

The Library offers an array of electronic services. The Library home page, (http://www.lib.neu.edu/), provides online access to the NU Library catalog, plus numerous other databases and licensed information resources, including abstracting services, full-text article and series publications, statistical resources, catalogs of other libraries, and other research information. A specific web page is devoted to architectural resources, including links to related architectural web sites. Licensed resources like databases and electronic journals may be searched by students, faculty, and staff whether on or off-campus.

3. Architecture collections

The Library holds a broad range of materials to support research and teaching in Architecture, including a core collection of NA classification architecture books that is heavily used. Over the past five years, supported in part by a University grant and in part by increased allocations of Library funds, the architecture and urban design collections have expanded. While the monograph collections have improved significantly, we intend to continue developing these and supporting collections.

The monograph collection is complemented by 23 journal titles focusing on architectural projects and issues, with indexing available through the Avery Index to Architectural Periodicals and Art Abstracts databases. Databases and journals in the broader discipline of art, social science journals with coverage of urban planning, and technical journals with articles on construction and the environmental impact of construction also provide resources for architectural research.

Non-print resources available to Architecture students include the microfilm editions of Sanborn Fire Insurance Maps for Massachusetts and the Library of American Civilization, providing materials on American architectural history as well as domestic, public, and institutional architecture. The Snell Library Media Center holds more than 80 videotapes and films on selected buildings, architects, and urban design topics.

Slide Library Self-Assessment
Prepared by Mary Hughes, Head of the Slide Library, September 2, 2005

The Slide Library is a teaching collection of 105,054 slides which supports the majors and concentrations within the Department of Architecture and the Department of Visual Arts. This collection of visual images provides teaching materials for each department and includes architectural history, design, theory, construction technology, landscape architecture and urban planning. Additionally, the collection includes fine art, graphic and interior design and photography. All of the architectural history and art history course utilize the slide library on a daily basis, and many other design and fine art courses rely on slides to illustrate design principles to students engaged in stu-

dio work. The collection is continually evaluated in order to determine that the breadth of coverage meets the growing and changing needs of each depar tment.

Slide Library Collections

The Head of the Slide Library makes decisions about visual resources and works closely with the architecture faculty to ensure that the collection supports the depar tment's courses. Surveys of world, renaissance, nineteenth century, twentieth century and American architecture are supported in depth. In addition, ther e is a comprehensive section on architectural theory, which includes structures, ar chitectural drawing techniques, typology and other didactic material r elated to each historical period. The collection of modern and contemporary architecture continues to gr ow to support needs of design courses.

The collection is a valuable teaching resource, which r eflects the needs of the curriculum, and includes technology to support courses. Every architectur e history class has an on-line course web site developed and maintained by the slide library staf f. Each site contains over 200 images and serves as a study guide students in the course. The sites are organized to reflect the structur e of the course syllabi, breaking down each lecture into a series of thumbnail pages through which students could access full-screen images. Pertinent information r egarding each building or site depicted is also included on each page and a random quiz page allows for student self-testing. Since these images are accessible via the web, students have to opportunity to review images at their convenience.

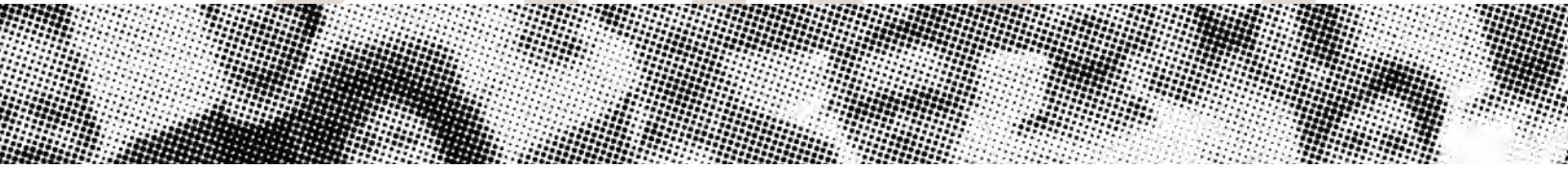
An inventory has been taken to identify buildings that are need of more complete documentation. The on-going goal is to ensure that plans, sections; architect's drawings, models, exterior and interior views for each building ar e represented. The variety of courses offered in architectural history and design contribute to the breadth of the collection. History, theory and criticism are incorporated into di fferent courses and the collection works to pr ovide detailed images, which are needed to analyze a building in depth. The collection supports the specific needs of the faculty while maintaining a strong general collection.

The architecture collection consists of 47,610 slides. Architectur e slides make up 46% of the total collection of slides. Acquisitions of architecture slides are generally 50% of the total acquisitions.

Staff

The slide library is a resource shar ed by the Department of Architecture and the Department of Visual Arts and is considered to be a valuable part of the educational team for both. The Head of the Slide Library works closely with architecture faculty in developing the architecture resour ces.

The Slide Library employs 2-4 work-study students per quarter and generally , there are



several architecture students on staff. Typically the student staff covers 25-30 hours per week. There is one Co-op position allotted to the Slide Library for a six-month position, 2 times per. Often the position remains vacant during on e of those slots due to student eligibility to funding (The position requires work-study funding and is not paid directly out of department budgets)

The Head of the Slide Library participates in regional and national confer ences held by ARLIS/New England and the Visual Resources Association. She remains current in cataloging standards and practices and up to date with software developments as they relate to the visual resource field.

Facilities

The slide collection is located within the department, making it convenient for faculty to access. There is sufficient space for both the collection and for faculty and students using the collection. The slide library is centrally located, clean, bright and well or ganized. There are environmental controls within the slide library and there have never been any environmental problems. There is regular access to all visual resour ces and none are in storage.

All slides are stored in Neumade steel cabinets, the industry standar d for archival storage of slides. All slides are bound in archival, anti-Newton glass mount. The pr eservation of film is a high priority for the slide librar y.

There are several workstations for faculty to use as well as a larg e light table in the center of the library. Currently, there are three Caramate viewers for lecture preparations and student views. There are also four slide projectors available for use, which supplement those that are provided for classroom use by the university's audiovisual services. There is a computer available to faculty for web access and printing. Additionally, the library has 2 computer workstations for staff for scanning and research.

The slide library is administered separately from the book collection. The collection is comprehensive and readily available. Requested images are purchased and produced within 2-3 weeks from the date of request, often sooner .

The Head of the Slide Library has been involved with professional organizations which routinely deal with issues of data standards, database management, subject analysis of images and other cataloging issues. She is experienced in using standard refer ence materials (Including Art and Architecture Thesaur us and Macmillan's Encyclopedia of Architects) as well as on-line resources in or der to maintain consistent data entry. This position requires original cataloging and management of IRIS, a FileMakerPro cata - loguing database.

Services

The Head of the Slide Library provides knowledgeable refer ence services to all users. Students are regularly assisted with resear ch and class presentation materials. A slide collection database can be searched by subject type, building type, title, or architect and reports can be generated on request. The current database will eventually be on-line so that sear ches can be done remotely by faculty.

Orientations to the collection ar e provided to all new faculty members and include policies, collection or ganization, and administrative procedures. The collection is orga - nized in a clear and or ganized manner and a r eference guide is available to users if required. The use of natural language in the catalog fields assists users with finding the images they need.

The library is able to of fer scanning ser vices on a limited bases and has recently acquired film recorders which will allow for the cr eation of slides from digital images.

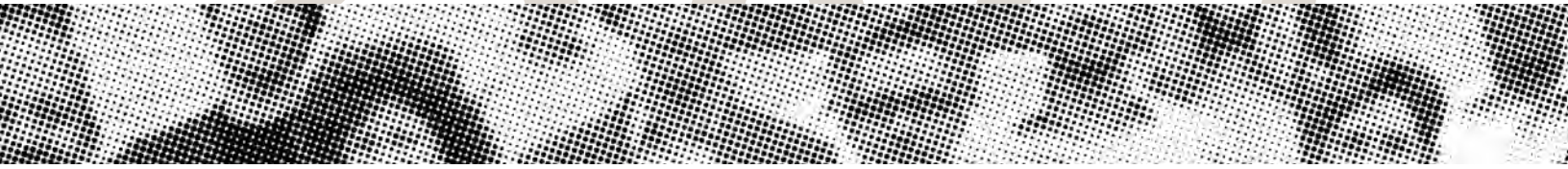
Policies are enforced for all collection users and are r eviewed and updated annually. There are separate policies for full-time faculty, part-time faculty, and students. While the primary patrons are faculty fr om the departments of Architecture (46.51%) and Visual Arts (44.5%), slides also circulate to University Coll ege faculty (6.5%), students (.5%), and faculty from other University departments (2 %). Approximately 20,000 slides circulate annually.

Faculty members have keys to the slide librar y and have 24-hour access. Students must use the collection during the University's open hours: M-F 8:30-4:30.

Faculty members are notified of new slide acquisitions that may be of inter est them. Significant acquisitions are noted in the Annual Report.

Funding is through institutional allocation. The current budget is $6000 per year and has not been increased in several years though the cost of slides, slide production and supplies has risen. Although the slide library has been able to complete all faculty requests, general collection development is limited by the cost of vendor slides and gaps in available books from Snell Library.

Development of digital imaging continues to be held up due to University copyright policy and technology limitations. Cost of ser vers, software and images with copyright permissions are prohibitive for the librar y to take on alone. Research on all available options is currently underway and grant proposals ar e being developed to request the amount of funding needed to start such a project. Additionally, the slide curator is seeking out campus-wide partnerships to build a committee to investigate options and bring the service and collection to a wider audience.



Conclusion

The slide library is efficiently managed and organized and has clear policies for use. Slides are processed into the collection with minimal delay and all faculty r equests are filled in a timely manner. When compared to peer institutions, the Slide Library is a medium-sized collection with a growth rate comparable to institutions with larger collections.

2005-2006
School of Architecture Budget

Account Number	Object Code	Object Name	2005-06
234750	1010	Salaries - Faculty	535,425
234750	1017	Salaries - Faculty - Extra Compensation	10,000
234750	1130	Salaries - Professional	21,463
234750	1310	Salaries - Office and Clerical	31,907
234750	2113	Salary Benefits	155,687
234750	3027	Travel - Lodging	7,000
234750	3041	Telephone - Toll Charges	150
234750	3042	Telephone - Instrument Charges	1,716
234750	3043	Telephone - Message Units	151
234750	3051	Postage	300
234750	3301	Supplies - Office	700
234750	3304	Supplies - Laboratory	2,000
234750	3330	Procurement Card	700
234750	3460	Photocopying Charges	720
234750	4710	Speaker Fees	1,000
234750	8001	Special Services	22,200
234750	8910	Faculty Development	62,800
234750			
234750		Part-Time Faculty	241,680
234750			
234750			
234750			
234750			
234750			
234750			
234750 Total			$1,095,599

3.10 Financial Resources

Evolving Program Budget, 2005-06 School of Architecture

The budget for the School of Architecture is outlined above. In addition to the positions need for both faculty and staff noted elsewhere in this document (two new staff positions; one in IT and the other an Associate Program Director; and three additional faculty positions), the budget significantly lacks and discretionary funds. Used for research support, conferences, colloquia, and other critical outreach events, the current discretionary figure is around $25,000 per year. That number needs to rise to about $100,000 per year.The budget in 2002 was $613,457, and this year is $1,095,599, a 78% increase over four years (though this year's budget includes our part-time faculty allotment, whereas the previous one did not). In addition, the University has made temporary capital improvements to house the studios in Dockser Gymnasium for the past two years, and this year budgeted approx. $1.6 million to permanently house the additional studios in the Ruggles MBTA Station. In that same time period, the pro-

gram has seen its enrollment nearly double from approx. 160 in 2002, to appr ox. 300 in 2005

Endowment, Scholarship, and Development Activities

The School of Architecture at Northeaster n is still quite new, and as such has no independent endowment, but the pr ogram is very aware of the need to build non-tuition based, independent funding sources. As part of the work of the External Adviso ry Board, the Program Director has been seeking to obtain funding for curriculum-based undergraduate and graduate research. In addition, the University has recently sup - plied development officers to assist with both individual and corporate giving. Several meetings have already been held with potential individual donors, and the School is working to establish relationships with regional rail yard owners, and utilities, whose interest in the post-industrial landscape (of which they ar e primary owners) is extensive.

The School is focused on more work in this area.

Comparative data with other pr ofessional programs at Northeastern University

The data shown on the following page compare the budget of the School of Architecture to that of other professional pr ograms at Northeastern . Obviously many of these programs are much larger, and are located in separate units from the level of a school within the College of Arts and Sciences (Journalism and Architectur e) to fully independent colleges reporting only to the Pr ovost of the University. All of these figures refer to the academic year 2003-04 (the most r ecent one for which the University has compiled accurate comparative records).

2005

Northeastern University

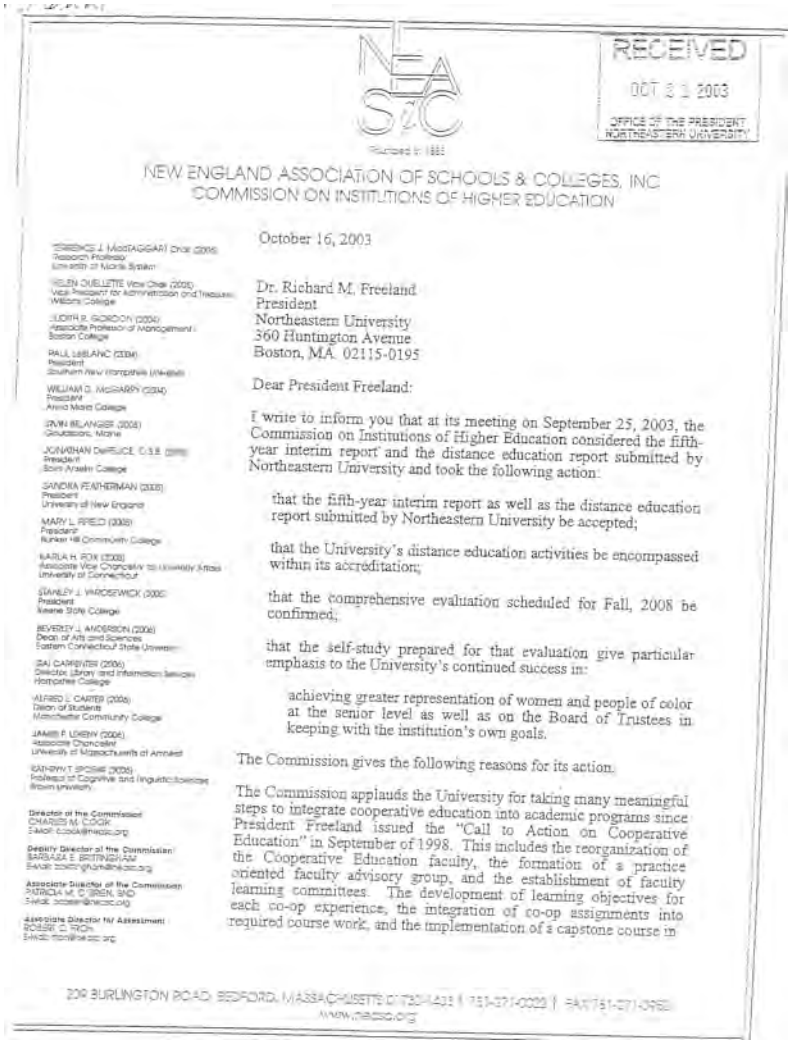
Architecture Program Report

College:	Bouve College of Health Sciences	*Pharmaceutical Sciences*	*School of Nursing*	College of Arts and Sciences	***Architecture***	*School of Journalism*	School of Law
	2003-04	**2003-04**	**2003-04**	**2003-04**	**2003-04**	**2003-04**	**2003-04**
FINANCIAL DATA:							
Budget							
Salary	$12,759,377	$1,305,036	$2,497,671	$37,122,289	$551,510	$823,403	$7,579,756
Benefits	$3,079,805	$309,562	$571,761	$8,626,741	$142,527	$213,167	$1,860,762
Grad. Tuition Awards	$1,169,770	$110,000	$105,000	$4,212,893	$0	$0	$0
Other Nonpersonnel	$1,323,512	$59,701	$142,165	$3,853,678	$22,090	$48,152	$1,949,136
Total Budget	**$18,332,464**	**$1,784,299**	**$3,316,597**	**$53,815,601**	**$716,127**	**$1,084,722**	**$11,389,654**
Other Nonpersonnel as % of Total Budget (Excluding Benefits and Tuition Awards)	9.40%	4.37%	5.39%	9.40%	3.85%	5.52%	20.46%
Other Nonpersonnel per FT Faculty	$11,312	$4,264	$5,687	$10,359	$3,156	$4,013	$59,065
Other Funds							
One-time support from Provost	$6,900			$251,504			$41,000
Research Overhead Sharing	$101,958			$361,939			$16,332
Minority Faculty Support	$518,123			$1,071,250			$22,050
Equipment Allocations	$182,483			$321,400			$16,826
Presidential Appropriations	$32,206			$0			$0
Total Funding	**$939,794**			**$2,367,493**			**$84,582**
Other Funds							
External Grants	$3,226,736	$1,411,199	$15,000	$15,396,190	$0	$0	$1,306,203
Ext. Grants/FT Fac.	$27,579	$100,800	$600	$41,388	$0	$0	$39,582
Students	2003-04	2003-04	2003-04	2003-04	2003-04	2003-04	2003-04
Undergraduate	1802	302	407	5516	207	376	0
Graduate	755	79	131	714	11	31	593
Faculty							
Full-Time	117	14	25	372	7	12	33
Average Salary	$72,479	$77,015	$67,787	$80,869	$72,914	$72,428	$135,840
Administration							
Full-Time Staff	57	15	7	187	1	2	56
Gradaute Assistants	18	17	0	287	0	0	39
Student/ FT Faculty Ratio	21.9	27.2	21.5	16.7	31.1	33.9	18.0
Student/ Staff Ratio	44.9	25.4	76.9	33.3	218.0	203.5	10.6
Student/ Graduate Assistants Ratio	142.1	22.4	NA	21.7	NA	NA	15.2
Total Budget per Student	$7,170	$4,683	$6,165	$8,638	**$3,285**	$2,665	$19,207

3.11 Administrative Structure

Must be part of Accredited Institution of Higher Education

Northeastern University has just received a r enewal of its ten-year accreditation from the New England Association of Schools and Colleges (NEASC). Documentation is available through the University website, at <www.neu.edu>.



RECEIVED
OCT 3 1 2003
OFFICE OF THE PRESIDENT
NORTHEASTERN UNIVERSITY

NEW ENGLAND ASSOCIATION OF SCHOOLS & COLLEGES, INC.
COMMISSION ON INSTITUTIONS OF HIGHER EDUCATION

October 16, 2003

Dr. Richard M. Freeland
President
Northeastern University
360 Huntington Avenue
Boston, MA 02115-0195

Dear President Freeland:

I write to inform you that at its meeting on September 25, 2003, the Commission on Institutions of Higher Education considered the fifth-year interim report and the distance education report submitted by Northeastern University and took the following action:

that the fifth-year interim report as well as the distance education report submitted by Northeastern University be accepted;

that the University's distance education activities be encompassed within its accreditation;

that the comprehensive evaluation scheduled for Fall, 2008 be confirmed;

that the self-study prepared for that evaluation give particular emphasis to the University's continued success in:

achieving greater representation of women and people of color at the senior level as well as on the Board of Trustees in keeping with the institution's own goals.

The Commission gives the following reasons for its action.

The Commission applauds the University for taking many meaningful steps to integrate cooperative education into academic programs since President Freeland issued the "Call to Action on Cooperative Education" in September of 1998. This includes the reorganization of the Cooperative Education faculty, the formation of a practice oriented faculty advisory group, and the establishment of faculty learning committees. The development of learning objectives for each co-op experience, the integration of co-op assignments into required course work, and the implementation of a capstone course in

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www.neasc.org

each major to enable students to integrate all of their course work and co-op experiences is particularly noteworthy.

The University appears to have made appropriate progress in ongoing efforts to assess student learning. In addition to the attention directed to the assessment of the Academic Common Experience, as well as cooperative education, significant progress has been made in assessment at the University and department level. Members of the Commission reviewed the sample presentations of assessment plans at the University and department level with great interest. We commend all these efforts and particularly recognize the attention being directed to working with the College of Criminal Justice and some departments in Arts and Science that have less detailed assessment plans.

The Commission takes favorable note of Northeastern's many efforts to improve its diversity in senior administrative and faculty positions, and at the governing board level toward the achievement of its own goals. Although considerable success has been realized at the governing board level, the Commission appreciates the University's candor in recognizing that there has been no demonstrable improvement at this point in quantitative indicators of diversity for senior administrative and faculty positions. As part the next self-study prepared for the comprehensive evaluation in 2008, the Commission wishes to learn how "compatible with its mission and purposes," Northeastern continuously "addresses its own goals for the achievement of diversity of race, gender, and ethnicity" (5.4).

Finally, the Commission praises the University for providing a comprehensive and informative report describing its distance learning programs. The attention directed to describing how Northeastern's distance learning program responds to each of the eleven standards is noteworthy.

You are encouraged to share this letter with all of the University's constituencies. It is Commission policy to inform the chairperson of the institution's governing board of action on its accreditation status. In a few days we will be sending a copy of this letter to Dr. Neal Finnegan. The institution is free to release information about the report and the Commission's action to others, in accordance with Commission policy.

The Commission hopes that the evaluation process has contributed to institutional improvement. It appreciates your cooperation in the effort to provide public assurance of the quality of higher education in New England.

If you have any questions about the Commission's action, please contact Charles M. Cook, Director of the Commission.

Sincerely,

Terrence J. MacTaggart

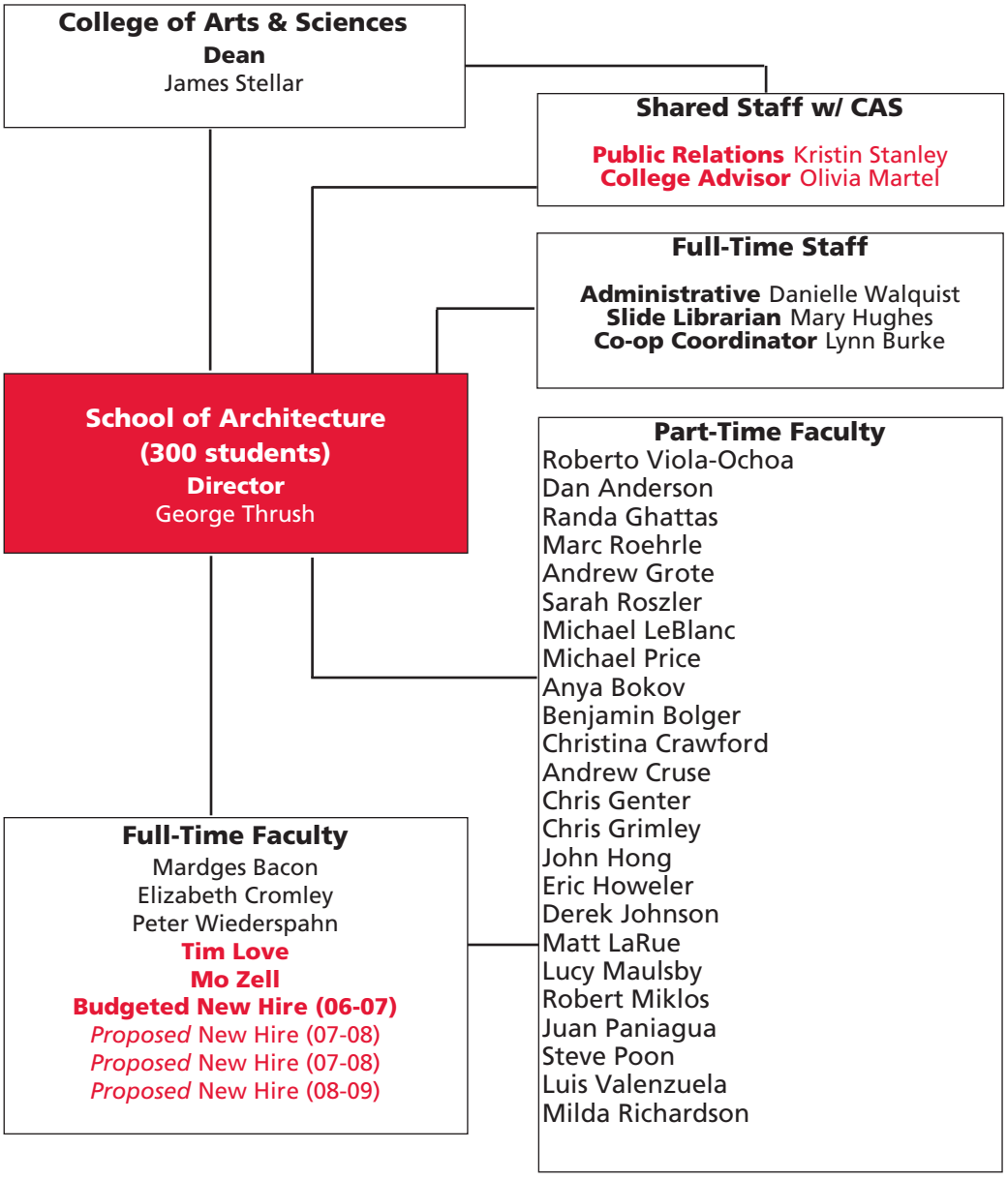
TJM/slo

Enclosure

cc: Dr. Neal Finnegan

Must have a degree of autonomy that is comparable to that afforded to other relevant professional programs in the institution, and sufficient to assure conformance with all conditions of accreditation

The School of Architecture has just succeeded the Department of Architecture, which is now one of three professional Schools within the College of Arts and Sciences. Its organizational chart is above, **positions in Red were budgeted at the time of the 2002 NAAB Visit, but have since been filled as indicated.**


College of Arts & Sciences
Dean
James Stellar
Shared Staff w/ CAS
Public Relations Kristin Stanley
College Advisor Olivia Martel
Full-Time Staff
Administrative Danielle Walquist
Slide Librarian Mary Hughes
Co-op Coordinator Lynn Burke
School of Architecture
(300 students)
Director
George Thrush
Part-Time Faculty
Roberto Viola-Ochoa
Dan Anderson
Randa Ghattas
Marc Roehrle
Andrew Grote
Sarah Roszler
Michael LeBlanc
Michael Price
Anya Bokov
Benjamin Bolger
Christina Crawford
Andrew Cruse
Chris Genter
Chris Grimley
John Hong
Eric Howeler
Derek Johnson
Matt LaRue
Lucy Maulsby
Robert Miklos
Juan Paniagua
Steve Poon
Luis Valenzuela
Milda Richardson
Full-Time Faculty
Mardges Bacon
Elizabeth Cromley
Peter Wiederspahn
Tim Love
Mo Zell
Budgeted New Hire (06-07)
Proposed New Hire (07-08)
Proposed New Hire (07-08)
Proposed New Hire (08-09)

3.12 Professional Degrees and Curriculum

Northeastern's architecture curriculum is guided by its mission to provide a strong undergraduate education in conceptual thinking and the liberal arts, while focusing its professional attention on preparing students to address the complex challenges of building in cities. The Design Studio sequence clarifies the specific themes of each year in the program, and forms the most influential aspect of a student' s education.

In the first year, students take a broad set of core liberal arts courses taught by faculty in the respective departments of the University. They study writing, history, mathematics, and science. In addition they take **core courses** in the basic skills and historical background necessary to pursue an architectural education. They take a survey of world architecture, figure drawing and drafting, two and thr ee dimensional design, and they get exposed to CAD. In most of these foundation studios, the students ar e mixed together with all other studio majors in the department; including graphic design, photography, animation, and general art.

In the second year, they begin their studio sequence in ar chitecture with two essential components: invention and language. Their first studio is in **site, type, and composition**, while the second is in **pattern and urban design**. These studios are supported by Renaissance history, and additional math and science.

By the third and fourth year, students begin their real preparation for the rigors of designing in the city. They take studios in **building beyond the city** and **option studios**. These students also often travel to Italy, and begin their str uctures courses as well. It is at this point in the curriculum that additional course content in infrastruc - ture and legal aspects will begin. Six month co-op work experiences bracket this portion of the cur riculum.

In the fifth year, the student's growing technical background is applied in Peter Wiederspahn's ***tectonics*** studio. This is followed by his **urban housing** studio which tries to integrate the urban design studio work with typology and complex urban sites. More urban research work will enter the cur riculum here as well.

In the sixth, graduate year, students integrate systems, their coursework in Mardges Bacon's Seminar in Modern Ar chitecture and the new Urban History/ Theory seminar with their **two-term thesis project for an intervention in Boston**. These projects will take the entir e year, and involve research, site, and economic analysis; in addition to comprehensive design.

Division A

(Last Name Begins with **A-L**)

Semester Plan Course Schedule

2004-05

Last Revised

August 24, 2004

B.S. Architecture plus Master of Architecture (NAAB accredited)

architecture

Summer (July & August) Mini-Mester #2

Course Number	Course Name	Credit Hours
Vacation		
Vacation		
Vacation		
Vacation		

Year	Course Number	Course Name	Credit Hours
1st year	Arc 256	Manual Representation	4
	Arc 111	World Architecture 1	4
	CORE	Core Curriculum Soc. Sci.	4
	CORE	Core Curriculum Math	4
		College: An Introduction	1
		Total Hours	17
2nd year	Arc 310	Studio 1: Site,Type & Composition	6
	PHY 141	Physics 1 for Eng.Tech.	3
	Arc 325	19th Century Arch & Urb.	4
	Elective	Open Elective	4
		Total Hours	17
3rd year	July-December	Co-op #1	
	July-December		
	July-December		
	July-December		
4th year	July-December	Co-op #2	
	July-December		
	July-December		
	July-December		
5th year	July-December	Co-op #3	
	July-December		
	July-December		
	July-December		
6th year	Arc 691	Thesis 1: Urban Research & Doc.	6
	Arc 315	Project Case Studies 1	6
	Elective	Open Elective	4
		Total Hours	16

(September- December) Fall Semester

Course Number	Course Name	Credit Hours
Arc 257	Digital Represenation	4
Arc 112	World Architecture 2	4
MTH 141	Calculus for Eng. Majors	4
CORE	Core Curriculum English	4
COP 101	Co-op- An Introduction	1
	Total Hours	17
Arc 311	Studio 2: Pattern & UD/The City	6
Arc 356	Structures 1: Statics	4
Arc 326	20th Century Arch & Urb.	4
Arc 329	American Housing	4
	Total Hours	18
Arc 410	Studio 3: Modern City Parts	6
Eng 301	Advanced Writing in Discipline	4
Arc 357	Structures 2: Tectonics	4
Elective	Open Elective	4
	Total Hours	18
Arc 510	Studio 4: Housing and Aggregation	6
Arc 330	Architecture Seminar	4
Arc 555	Environmental Systems	4
Elective	Open Elective	4
	Total Hours	18
Arc 511	Studio 5: Tectonics	6
Arc 656	Integrated Building Systems	4
CORE	Core Curriculum III-VI	4
Elective	Open Elective	4
	Total Hours	18
Arc 692	Thesis 2: Design & Intervention	6
Arc 130	Seminar in Modern Architecture	4
Arc 316	Project Case Studies 2	6
	Total Hours	16

Italy Semester at SAC

ARCH 450: The City and its Edges		6
ARC 495: Euro Arch. Seminar		4
ARID 495 Beg. Env. Design (ARC 555)		4
Open Elective		4
	Total Hours	18

If you went to Italy...

Advanced Writing in Discipline		4
Structures 2: Tectonics		4

Summer (May & June) Mini-Mester #1

Course Number	Course Name	Credit Hours
Vacation		
Vacation		
Vacation		
Vacation		
Vacation		
Vacation		
Vacation		
Vacation		
Elective	Open Elective	4
Arc 358	Adv. Representation	4
	Total Hours	8
CORE	Core Curric. III-VI	4
CORE	Core Curric. III-VI	4
	Total Hours	8

Credit Hours

Co-op Integration & Experiential Ed. Req.:

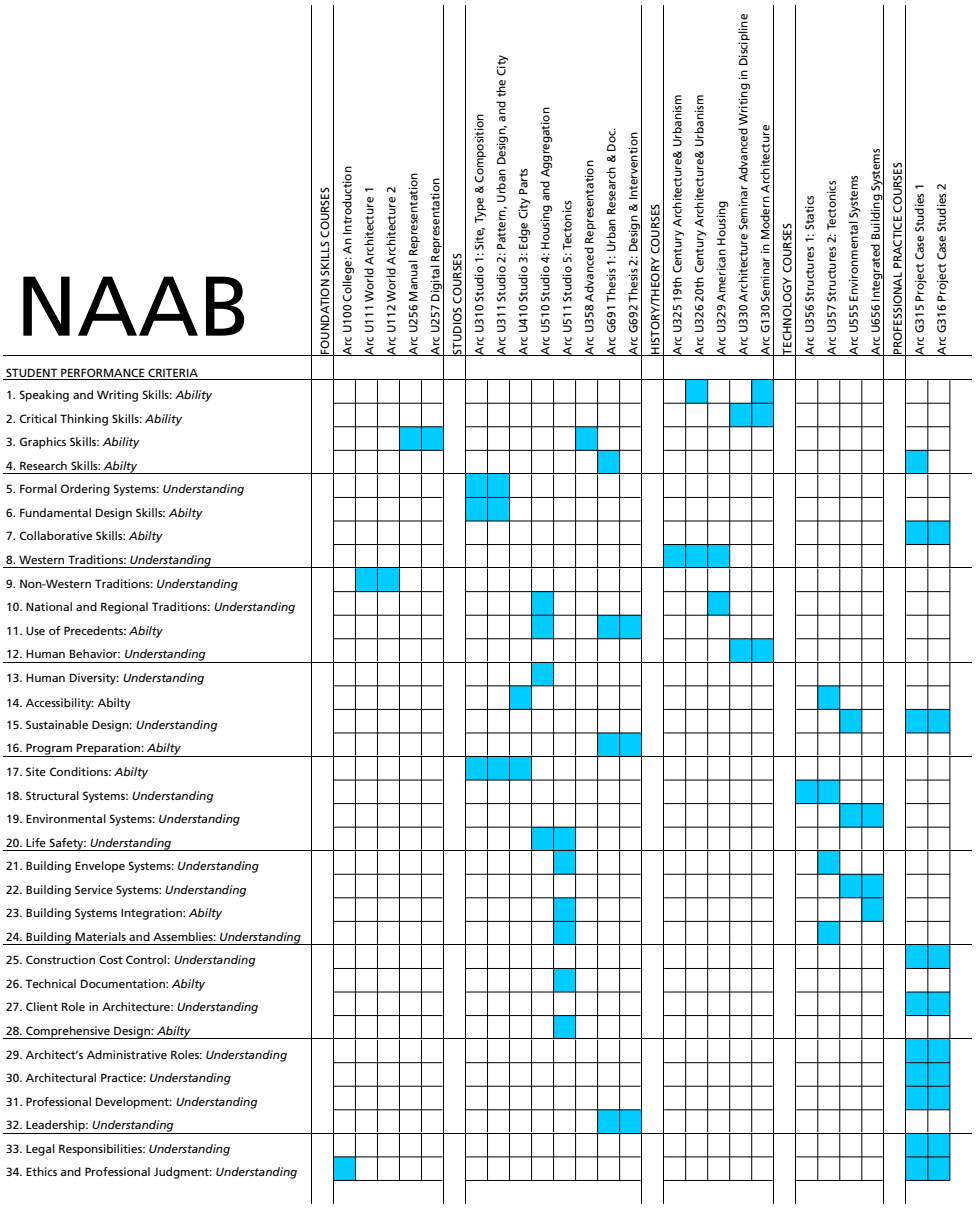
Studio 5: Housing & Aggregation ARC 510

B.S. Major in Architecture	**130**
History/ Theory	24
Technology	23
Design	30
Core Curriculum	29
Foundation	12
Open Elective	12
Total	130

M. Arch. (NAAB Accredited)	**32**
History/ Theory	4
Design	12
Professional Practice	12
Open Elective	4
Total	32

3.13 Curricular Matrix

Bachelor of Science, Major in Architecture
Plus
Master of Architecture



4. Supplemental Information

4.1 Student Progress Evaluation Procedures

Transfer credits are evaluated at two levels at Northeastern. Cr edits in general studies are handled by the College of Arts and Sciences in coordination with th e Admissions Office. Architecture credits are handled directly by the School of Architecture. When a transfer student applies, he or she is given a transfer credit evaluation from the College and sent then to Ar chitecture to see where that student will enter the program. If the student doesn't come from an architecture backgr round, that pooint is the beginning of the pr ogram. If they come fr om an accredited architecture school, their portfolio is evaluated and they are placed accordingly.

For students who are already in the School of Architecture, they must maintain an overall QPA (GPA) of 2.5. If they dr op below that mark, they receive a letter from the Director stating that they have one semester to raise their QP A back up above 2.5 or risk being dropped from the School (the College of Arts and Science' s minimum standard is 2.0, so they often transfer into a dif ferent department at Northeastern, within that College).

4.2 Studio Culture Policy

Students are expected to work in the design studio space af forded them, and to be rfespectful of the belongings of others. Also, they are encouraged to work alongside, and learn from one another. Being prepared is also encouraged, as opposed to heroic "all-nighters".

4.3.1 Undregraduate Course Descriptions

Course: **CARCU100** Credit: 1 Semester Hours
Std Title (30 Char): College: An Introduction Abbrv Title (11 Char): COLL INTRO
Full Title: College: An Introduction
Prereqs:

Labs/Coreqs:

Description: Intended for 1st year students in the College of Arts and Sciences. Introduces students to liberal arts; familiarizes them with their major; develops the academic skills necessary to succeed (e.g. analytical ability and critical thinking); provides grounding in the culture and values of the University community; and helps to develop interpersonal skills--in short, to familiarize students with all skills needed to become a successful university student.

Course: **CARCU111** Credit: 4 Semester Hours
Std Title (30 Char): Hist of World Architecture 1 Abbrv Title (11 Char): WORLD ARC 1
Full Title: History of World Architecture 1
Prereqs:

Labs/Coreqs:

Description: Introduces selected examples of world architecture and urbanism. Emphasizes historic development of architecture, building types, stylistic characteristics, and relations between architectural works and the cultures that produce them.

Course: **CARCU112** Credit: 4 Semester Hours
Std Title (30 Char): Hist of World Architecture 2 Abbrv Title (11 Char): WORLD ARC 2
Full Title: History of World Architecture 2
Prereqs: CARCU111

Labs/Coreqs:

Description: Introduces selected examples of world architecture and urbanism. Emphasizes historic development of architecture, building types, stylistic characteristics, and the relations between architectural works and the cultures that pr oduce them.

Course: **CARCU223** Credit: 4 Semester Hours
Std Title (30 Char): American Architecture Abbrv Title (11 Char): AMER ARCH
Full Title: American Architecture
Prereqs:

Labs/Coreqs:

Description: Offers an introduction to the history, theory, and criticism of American architecture and urban planning from the mid-1600s to the 1930s. Explores the social and cultural forces that shape the built environment. Examines European influences as well as uniquely American contributions. Emphasizes the work of Louis Sullivan, H. H. Richardson, and Frank Lloyd Wright. (Core Category III)

Course: **CARCU256** Credit: 4 Semester Hours
Std Title (30 Char): Manual Representation Abbrv Title (11 Char): MANUAL REPR
Full Title: Manual Representation
Prereqs:

Labs/Coreqs:

Description: Introduces architectural drawing techniques, tools, and materials. Included are lettering, dimensioning; orthographic, axonometric, and one- and two-point perspective.

Course: **CARCU257** Credit: 4 Semester Hours
Std Title (30 Char): Digital Representation Abbrv Title (11 Char): DIGTAL REP
Full Title: Digital Representation
Prereqs: CARCU256

Labs/Coreqs:

Description: Introduces CAD processes for two- and three-dimensional modeling for architectural design. Studies computer-aided design techniques that support site and program analysis concept and schematic design, and design development and construction drawing applications. Lab fee.

Course: **CARCU310** Credit: 6 Semester Hours
Std Title (30 Char): Studio 1: Site, Type, Composit Abbrv Title (11 Char): STUDIO 1
Full Title: Studio 1: Site, Type Composition
Prereqs: CARCU256 CARCU257

Labs/Coreqs:

Description: Students learn to analyze, draw, and model the built environment. They will engage in issues of program, composition, type, and material. They will learn to think conceptually about architectural design.

Course: **CARCU311** Credit: 6 Semester Hours
Std Title (30 Char): Studio 2: Pattern & Urban Des Abbrv Title (11 Char): STUDIO 2
Full Title: Studio 2: Pattern and Urban Design
Prereqs: CARCU310

Labs/Coreqs:

Description: Students learn to analyze, model, and intervene in the city. They will engage in issues of figure/ground, mass, language, and sequence, understanding the city first as pattern, then as rhetoric and image. Projects include proposed alterations to public spaces and the Boston waterfront.

Course: **CARCU325** Credit: 4 Semester Hours
Std Title (30 Char): 19th C Architecture & Urbanism Abbrv Title (11 Char): 19TH C ARC
Full Title: Nineteenth Century Architecture and Urbanism

Prereqs:
Previous architectural history course or permission.
Labs/Coreqs:

Description: Surveys the development of modern architecture in the United States and Europe from the mid-eighteenth to the late nineteenth century. Discusses architecture and urban design in the context of their cultural responses to society's changing conditions. Includes field trips.

Course: **CARCU326** Credit: 4 Semester Hours
Std Title (30 Char): 20th C Architecture & Urbanism Abbrv Title (11 Char): 20TH C ARC
Full Title: Twentieth Century Architecture and Urbanism
Prereqs:
Previous architecture course or permission.
Labs/Coreqs:

Description: Examines the forms and principles of European and American architecture of the twentieth century, emphasizing the work of Frank Lloyd Wright, Mies van der Rohe, LeCorbusier, and Louis Kahn; and such influential movements as the Dutch de Stijl, Russian constructivism, and American postmodernism and deconstruction. Includes field trips.

Course: **CARCU329** Credit: 4 Semester Hours
Std Title (30 Char): American Houses and Housing Abbrv Title (11 Char): AMER HOUSE
Full Title: American Houses and Housing
Prereqs:
Previous architectural history course or permission.
Labs/Coreqs:

Description: Examines the architecture of American houses from first settlements of European colonists in the sixteenth century to issues in the 1900s. Aims to uncover the ways that architecture, seen through the lens of a particular building type, responds to the demands of materials, climate and geography, ethnic traditions, artistic expression, and changing societal forms.

Course: **CARCU356** Credit: 4 Semester Hours
Std Title (30 Char): Structures 1: Statics Abbrv Title (11 Char): STRUCT 1
Full Title: Structures 1: Statics
Prereqs: CPHYU151 Physics for Engineers 1 CMTHU241 Calculus 1 for Sci/Engin

Labs/Coreqs:

Description: Introduces the theory of materials and structur es. Examines basic structural elements in masonry and wood construction. Uses historic and current building types to explore the relationship between structur e, materials, construction process, and architectural space. Includes lectures, discussions, field trips, and student pr esentation of structural models and diagrams.

Course: **CARCU357** Credit: 4 Semester Hours
Std Title (30 Char): Structures 2: Tectonics Abbrv Title (11 Char): STRUCT 2
Full Title: Structures 2: Tectonics
Prereqs: CPHYU151 Physics for Engineers 1 CMTHU241 Calculus 1 for Sci/Engin

Labs/Coreqs:

Description: Introduces the theory of materials and structur es. Examines basic structural elements in masonry and wood construction. Uses historic and current building types to explore the relationship between structur e, materials, construction process, and architectural space. Includes lectures, discussions, field trips, and student pr esentation of structural models and diagrams.

Course: **CARCU358** Credit: 4 Semester Hours
Std Title (30 Char): Modeling & Design Comm Abbrv Title (11 Char): MOD DES COM
Full Title: Modeling and Design Communication
Prereqs: CARCU257

Labs/Coreqs:

Description: Builds on CAD skills to develop ability to model in thr ee dimensions and develop surfaces and lighting. The course also addresses strategies in design communi cation for effective presentation of digital material.

Course: **CARCU410** Credit: 6 Semester Hours
Std Title (30 Char): Studio 3: Building Beyond City Abbrv Title (11 Char): STUDIO 3
Full Title: Studio 3: Building Beyond the City
Prereqs: CARCU311

Labs/Coreqs:

Description: Students learn to analyze, draw, model the suburban and exurban environment. They will engage in issues of rhetoric, image, landscape, and time. Projects include strategizing new urban types in order to reintroduce public life into the com - mercial landscape of suburbia.

Course: **CARCU411** Credit: 6 Semester Hours
Std Title (30 Char): Option Studio 1 Abbrv Title (11 Char): OPTION1

Full Title: Option Studio 1
Prereqs: CARCU410 Studio 3: Building Beyond the City

Labs/Coreqs:

Description: This design studio course offers special content necessary to effect the transition from the quarter system to the semester system. It will be used by itself, or in combination with ARC U412 to reconcile the new studio sequence with the old.

Course: **CARCU412** Credit: 6 Semester Hours
Std Title (30 Char): Option Studio 2 Abbrv Title (11 Char): OPTION2
Full Title: Option Studio 2
Prereqs: CARCU410 Studio 3: Building Beyond the City

Labs/Coreqs:

Description: This design studio course offers special content necessary to effect the transition from the quarter system to the semester system. It will be used by itself, or in combination with ARC U411 to reconcile the new studio sequence with the old.

Course: **CARCU510** Credit: 6 Semester Hours
Std Title (30 Char): Studio 4: Housing & Aggregat Abbrv Title (11 Char): STUDIO 4
Full Title: Studio 4: Housing and Aggregation
Prereqs: CARCU410

Labs/Coreqs:

Description: Students will understand multi-unit housing in America and Europe. They will work in teams to develop new patterns of housing for Boston area sites, and develop those sites with their own individual interventions.

Course: **CARCU511** Credit: 6 Semester Hours
Std Title (30 Char): Studio 5: Tectonics Abbrv Title (11 Char): STUDIO 5
Full Title: Studio 5: Tectonics
Prereqs: CARCU510

Labs/Coreqs:

Description: Students will focus on the materials and making of architecture. The course considers architectural connections at all scales from the nut and bolt to the scale of a door or window, to the scale of the whole building and the city. Unlike traditional design studios that produce a schematic design before considering constructional ideas, this studio will ground our design proposals upon a tectonic strategy.

Course: **CARCU555** Credit: 4 Semester Hours
Std Title (30 Char): Environmental Systems Abbrv Title (11 Char): ENVIRONSYS
Full Title: Environmental Systems
Prereqs: CARCU357

Labs/Coreqs:

Description: Students in this course will explor e the ways in which architectural form can create particular conditions of light and shadow, provide shelter from heat, cold, and rain, and incorporate systems that pr ovide for water electricity and sanitation. The course will be taught as a series of small-scale design pr ojects. The program for the design projects will be simple and straightforwar d.

Course: **CARCU656** Credit: 4 Semester Hours
Std Title (30 Char): Integrated Building Systems Abbrv Title (11 Char): BLDG SYS-TEM
Full Title: Integrated Building Systems
Prereqs: CARCU357

Labs/Coreqs:

Description: In this course students learn to integrate into their building designs all the environmental and tectonic systems that they have learned in previous ar chitecture courses.

Course: **CARCU921** Credit: 1 Semester Hours
Std Title (30 Char): Dir ected Study Abbrv Title (11 Char): DIRSTUDY
Full Title: Directed Study
Prereqs:
Permission of Instructor
Labs/Coreqs:

Description: Offers independent work on chosen topics under the dir ection of members of the department.

Course: **CARCU922** Credit: 2 Semester Hours
Std Title (30 Char): Directed Study Abbrv Title (11 Char): DIRSTUDY
Full Title: Directed Study
Prereqs:
Permission of Instructor
Labs/Coreqs:

Description: Offers independent work on chosen topics under the dir ection of members of the department.

Course: **CARCU923** Credit: 3 Semester Hours
Std Title (30 Char): Directed Study Abbrv Title (11 Char): DIRSTUDY
Full Title: Directed Study
Prereqs:
Permission of Instructor
Labs/Coreqs:

Description: Offers independent work on chosen topics under the direction of members of the department.

Course: **CARCU924** Credit: 4 Semester Hours
Std Title (30 Char): Directed Study Abbrv Title (11 Char): DIRSTUDY
Full Title: Directed Study
Prereqs:
Permission of Instructor
Labs/Coreqs:

Description: Offers independent work on chosen topics under the direction of members of the department.

4.3.2 Graduate Course Descriptions:

Course: **CARCG130** Credit: 4 Semester Hours
Std Title (30 Char): Seminar in Modern Arch. Abbrv Title (11 Char): SEMMODARCH
Full Title: Seminar in Modern Architecture
Prereqs: BS in Architecture
Labs/Coreqs:

Description: Examines the state of architecture and urbanism in the two decades leading up to 2000. Explores contemporary issues in architectural theory and urban design. Examines a broad range of ideas affecting contemporary developments in architectural practice. Engages cultural and historical forces as well as contemporary criticism to define the nature of modernism, late modernism, postmodernism, and deconstruction. Case studies, analysis of theoretical models, and application of methods of history provide students with support for their own design work in studio and co-op experiences.

Course: **CARCG315** Credit: 6 Semester Hours
Std Title (30 Char): Project Case Studies 1 Abbrv Title (11 Char): PROJCASEST1
Full Title: Project case Studies 1
Prereqs: BS in Architecture
Labs/Coreqs:

Description: Focuses on how architectural practice occurs and must be understood

within a larger social context. The cultures-interests and objectives-of the constella - tion of participants in the bringing of a building to completion are dynamic, diverse, and complex, especially in an urban environment. Seeks to make sense of this broader social contract from within the perspective of professional design practice. As one of many participants in the process of bringing a building to completion, students review the roles, responsibilities, and interests of each contributor. Our task is to understand the obligations and constraints that constitute these relationships. Examines the prod - ucts of design as manifestations of these r elationships and situates them within a dis- course of value-determined actions. Investigates normative and critical professional practices through selected readings and individual field r esearch. Develops project case studies that provide examples of excellent design results achieved through the application of expert professional practices.

Course: **CARCG316** Credit: 6 Semester Hours
Std Title (30 Char): Project Case Studies 2 Abbrv Title (11 Char): PROJCASEST2
Full Title: Project Case Studies 2
Prereqs: ARCG315
Labs/Coreqs:

Description: Continues ARC G315. Builds on the understanding of professional practice developed in the previous course and investigates the array of "artful ways in which some practitioners deal competently with the indeterminacies and value conflicts of practice." These indeterminacies, uncertainties, and value conflicts are par t of a rapid- ly changing, dynamic world. There is an unprecedented need for flexible and r espon- sive practices that can bridge the gap between traditional professional techniques and these situations. Requires core competencies that are not mismatched with the chang - ing situations of practice. Requir es new skills as well as traditional analytic techniques to respond adequately to these unique conditions of work. Through a closer examina - tion and development of an in-depth project case study, students speculate on possi- ble approaches to a revised and restructur ed model of professional knowledge and guidelines for reflective practice that can sustain a culture of design excellence.

Course: **CARCG691** Credit: 6 Semester Hours
Std Title (30 Char): Graduate Thesis 1 Abbrv Title (11 Char): THESIS1
Full Title: Graduate Thesis 1
Prereqs: BS in Architecture
Labs/Coreqs:

Description: Offers the first in a two-part thesis pr oject focused on the complex issues facing the postindustrial landscape of the contemporary city. Boston serves as the lab - oratory for the study of issues such as air -rights development, brown fields develop- ment, regional identity, and in-fill building. Builds a body of resear ch and analysis of the built environment and the forces that shape it. Provides the foundation for the more speculative design proposals of the second part of the course.

Course: **CARCG692** Credit: 6 Semester Hours
Std Title (30 Char): Graduate Thesis 2 Abbrv Title (11 Char): THESIS2
Full Title: Graduate Thesis 2
Prereqs: CARCG691
Labs/Coreqs:

Description: Offers the second in a two-part thesis project focused on the complex issues facing the postindustrial landscape of the contemporary city. Based on research, analysis, and modeling of the region done in the first semester, students propose synthetic solutions to the complex problems of postindustrial development, housing, and identity facing the contemporary city.

4.4 Faculty Resumés
(See Appendix C)

4.5 VTR from Previous Visit (2002)
(See Appendix D)

4.6 Annual Reports since 2002 Visit
(See Appendix E)

4.7 School Catalog
(See Appendix F)

Appendix A Required Text for Catalogs and Promotional Materials
(taken directly from 2004-05 NU Architecture Catalog)

Admission Requirements

Admissions to the Northeastern Architecture Program is handled through the University Admissions Office in 150 Richards Hall at <www.admissions.neu.edu> or via email, at <admissions@neu.edu>, or via telephone (617-373-2200). In order to have an idea of what kind of academic performance a prospective student can expect, incoming Architecture students' average S.A.T. scores are approximately 1240, combined. The Department of Architecture does not have a separate admissions process, and as a result, **there is no portfolio requirement for admission**. However, should prospective students want to meet with Architecture faculty during their decision making process, or prior to beginning their studies, they may contact the Department of Architecture, at 617-373-4637, or through the Department's website, which can be located through <www.architecture.neu.edu>. All freshmen begin their studies in the fall term.

Transfer Students

Northeastern Architecture accepts internal and external Transfer Students when space permits. The University Admissions Office will evaluate general course transfer credits, and the Department of Architecture will evaluate how a prospective student's studio work coordinates with Northeastern's curriculum. The minimum GPA requirement of 3.2 is required for all students wishing to transfer into architecture. Potential transfer students should understand that in nearly every case, students will need to spend more time getting their degree than they would have if they had stayed at their original institution. Seldom do courses match up perfectly, and sometimes transfers will be required to take a large number of courses in order to "catch up" to their Northeastern counterparts.

Degrees & NAAB Accreditation

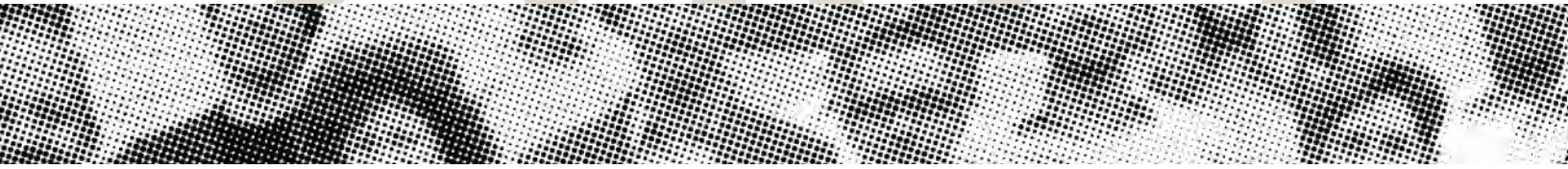
The Northeastern Architecture program has long been a very successful pre-professional program (**B.S. degree, major in architecture**), however, in 2003, the **new M.Arch program was granted "professional accreditation" by the National Architectural Accreditation Board (NAAB)**. This means, M.Arch program graduates will no longer be required to attend graduate school in order to sit for State Licensing Board examinations. Our graduates will be eligible, following apprenticeship programs supervised by the National Council of Architectural Registration Boards (NCARB), to become licensed architects in any state without further education. Since in the Fall of 2001, our graduates have been eligible to enter the one-year program to receive the Master of Architecture (M. Arch) degree (after completion of the B.S. Arch).

The following text is what the NAAB requires that we include in order to clarify their degree and accreditation policies:

"In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accreditation Board (NAAB), which is the sole agency authorized to accredit US professional degree programs in architecture, recognizes two types of degrees: the Bachelor of Architecture and the Master of Architecture. A program may be granted a five-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

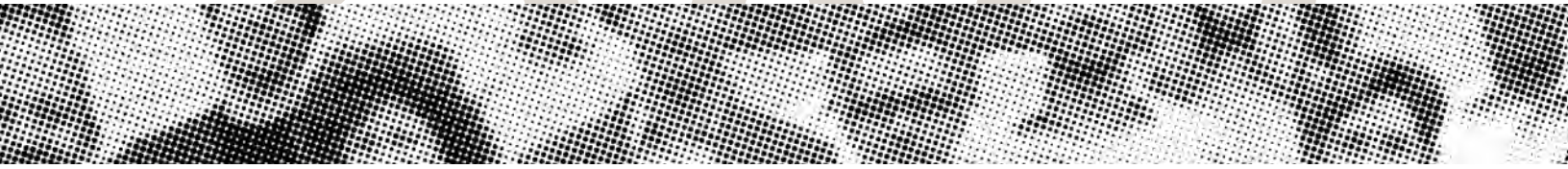
Masters degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree by itself is not recognized as an accredited degree."

"The NAAB grants candidacy status to new programs that have developed viable plans for achieving initial accreditation. Candidacy status indicates that a program should be accredited within six years of achieving candidacy, if its plan is properly implemented."

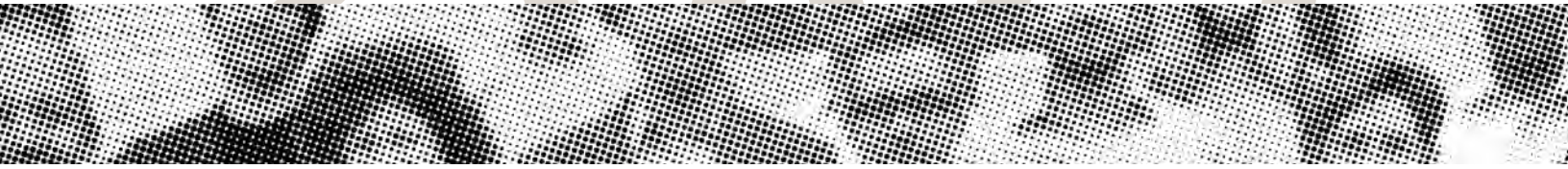


Appendix B Information Resources Statistics

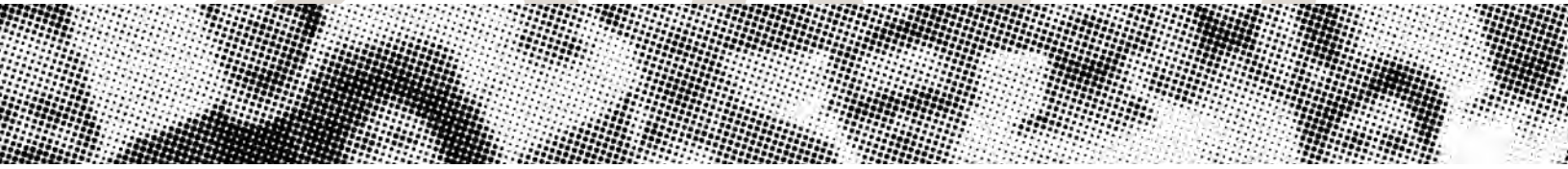
(Library Holdings, see also Section 3.9)



Appendix C Faculty Resumés

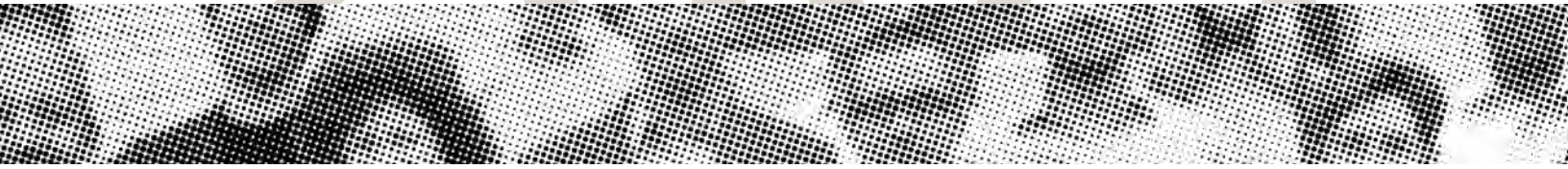


Appendix D VTR from Previous Visit (2002)



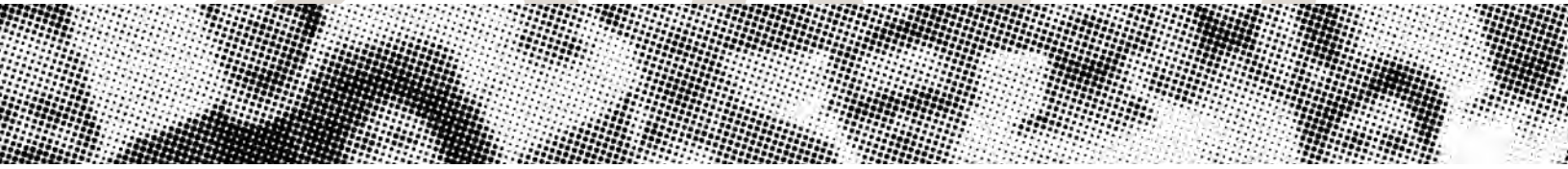
Appendix E Annual Reports since 2002 Visit

2002-03
(year of NAAB visit, annual report not done as per NAAB r egs. at the time)
2003-04 Included
2004-05 Included



Appendix F School Catalogs

Undergraduate catalog
Graduate catalog



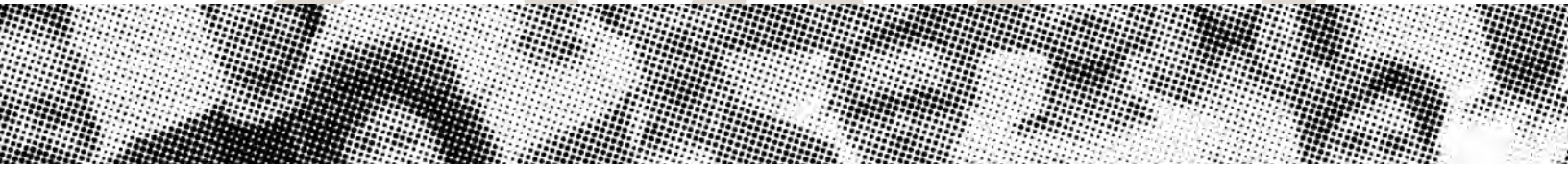
Appendix G Plans of Architecture Facilities

Dockser Studio
Ruggles Studio (current, Fall 2005)
Ruggles Studio (expanded, Spring 2006)
Ryder Hall, Ground Floor

2005

Northeastern University

Architecture Program Report



Appendices