

**BOARD OF HIGHER EDUCATION**  
**REQUEST FOR COMMITTEE AND BOARD ACTION**

**COMMITTEE:** Assessment and Accountability

**NO.:** AAC 10-02

**COMMITTEE DATE:** November 3, 2009

**BOARD DATE:** November 10, 2009

---

**APPLICATION OF BOSTON ARCHITECTURAL COLLEGE TO AWARD THE  
MASTER OF LANDSCAPE ARCHITECTURE**

**MOVED:** The Board hereby approves the application of **Boston Architectural College** to award the **Master of Landscape Architecture**.

Authority: Massachusetts General Laws Chapter 69, Section 30 et seq.

Contact: Dr. Francesca Purcell, Associate Commissioner for Academic Policy

## **BOARD OF HIGHER EDUCATION**

### **Boston Architectural College**

#### Master of Landscape Architecture

#### **INTENT**

In March 2009, the Boston Architectural College (BAC) filed a petition with the Department of Higher Education to seek approval to award the Master of Landscape Architecture. Intending to build on the College's recently approved Bachelor of Landscape Architecture in 2005, the primary goal of the proposed program is to prepare graduates who are seeking a first professional degree for licensing as a landscape architect for employment in private consulting practice, governmental, non-profit and conservation groups; teaching, research, development; and landscape design-building, nursery operations and facilities management. The proposed degree will provide students advanced academic preparation and training for careers focused on environmental sustainability and climate change. The focus of the proposed program aligns with the College's mission and its tradition of concurrent academic and practice curricula, allowing students to attend courses in the afternoons and evenings while working full time.

According to the American Society of Landscape Architects, there is an increased demand for landscape architects due to labor force changes and environmental crisis. American colleges and universities are not graduating enough students in the design fields to replace older landscape architects who are retiring from the profession. Further complicating this scenario are a number of factors, such as climate change, relocation of large populations, and environmental permitting (the process by which projects affecting the environment gain approval from local, state, federal, and international environmental and regulatory agencies), creating increased demand for highly skilled designers with advanced training and education.

#### **INSTITUTIONAL OVERVIEW**

The Boston Architectural College is a private non-profit institution originally incorporated in 1883 as the Boston Architectural Club. The name was changed to the Boston Architectural Center (BAC) in 1944 and to the Boston Architectural College in 2006. Over the years the BAC evolved from its origin as a meeting place where people involved in architecture came to learn and teach one another to a formal degree-granting institution. In 1979, the BAC received authority to award the Bachelor of Architecture degree. In 1993, authority was granted to award the Bachelor of Interior Design. The Board of Higher Education awarded additional authority to grant the Master of Architecture and the Master of Interior Design in 1997. The BAC was granted authority to award the Bachelor of Design Studies in 2004 and the Bachelor of Landscape Architecture in 2005. The institution's philosophy has remained unchanged, grounded on apprenticeship and mentorship in the workplace and classroom.

Motivated by the increasing importance of educational attainment in the design fields, the BAC intends offer all of its professional degrees at both the bachelor and master level. The BAC now seeks to offer a Master in Landscape Architecture.

#### **ACADEMIC AND RELATED MATTERS**

*Curriculum* (Attachment A)

The curriculum for the proposed program was specifically tailored to meet the skills and knowledge identified by the *Landscape Architecture Body of Knowledge Study Report*, published by the American Society of Landscape Architects in 2004, the newly revised standards of the Landscape Architecture Accreditation Board and the Council of Landscape Architecture Registration Board exam. To deliver these learning objectives, the BAC developed an academic component (38 courses for 96 credits) that provide a progression of content and skill development in five thematic areas: design communications, natural sciences, research skills, construction technology and landscape architecture design; and culminates with a comprehensive design thesis. The first-year curriculum of the MLA (foundation) and the last year (thesis) are cross-disciplinary offerings provided by the wider College to serve landscape, interior design and architecture students jointly. The proposed program would deliver the middle three years of the MLA through its own organizational structure, while providing direction, policy, mentoring and oversight for students in all years of the program.

Complementing the academic component of the proposed program is a formal practice component (45 credits based on a contact ratio of 100 hours of work per one-practice credit), where students work in approved, supervised settings to earn credit, most often as a paid employee. Students are evaluated on having attained specific learning objectives at key points in their passage through the proposed degree program and must achieve these in order to graduate.

First-year students in the proposed program also have the option of enrolling full time in all academic component courses for the duration of one year as part of the academic-only program (AOP). Students in AOP typically take classes during the day and evening and would transition to the concurrent model of taking both academic and practice component courses in their second year of the program.

In summary, students would be required to complete 96 credits (38 classes) in the academic component and 45 credits in the practice component of the curriculum for a total of 141 credits. The proposed program would require approximately five years to complete, assuming that the student has no transfer credit.

### ***Tuition and Fees***

Graduate tuition is \$8,556 based on full-time enrollment of 6-10 credits per semester. Tuition for the academic-only first-year program (AOP) is \$11,460 based on 12-18 credits per semester.

### ***Admission***

The BAC has a century-old commitment to open admissions. For the proposed program, as for other graduate programs, evidence of an undergraduate degree, plus a completed application form, official college transcript for prior degree work, \$50 application fee, 500-word essay, and a current résumé are required for admission. If a student is applying for advanced placement in some of the required course sequences or prior practice credit, then a portfolio and evidence of advanced skills are required. Admissions decisions are made throughout the year on a rolling basis.

### ***Projected Enrollment***

For the proposed program, the BAC projects a total of 10 new students in the first semester of the program, 17 students at the end of the second year and eventually 38 students by the end of the fifth year of enrollment.

Projected Enrollments (Full Time)	2009-10		2010-11		2011-12		2012-13		2013/14	
	Fall	Spring								
First Cohort		10	8	6	5	5	5	5	4	4
Second Cohort			8	6	6	6	6	5	5	5
Third Cohort				5	4	3	3	3	3	3
Fourth Cohort					8	6	5	5	5	4
Sixth Cohort						5	4	3	3	3
Seventh Cohort							7	6	4	4
Eighth Cohort								5	4	3
Ninth Cohort									7	6
Tenth Cohort										6
Total enrollment	0	10	16	17	23	25	30	32	35	38

## RESOURCES

### *Human Resources*

The two existing full-time program directors of the Bachelor of Landscape Architecture will teach masters-level courses in the proposed program and will also administer the program. Their current teaching loads will be reduced to allow them to focus on the MLA program. The two program directors are supported by the administrative staff who serve all professional degrees within the College.

Also, the BAC hires a landscape/urban ecologist at the launch of the MLA in the fall of 2010. This person's duties will lie solely within the masters program. This faculty member will be expected to hold a Ph.D. in Ecology with an interest in Urban Ecology and Hydrology and an established research agenda. The new faculty member will be expected to be able to balance research and the demands of teaching within a wide spectrum of sustainability and environmental systems courses with an emphasis on landscape architecture and the urban environment.

In addition to the these faculty members, 32 part-time adjunct or "volunteer" faculty, who currently teach undergraduate courses in the Bachelor of Landscape program, will also teach graduate-level courses in the proposed program. Many "volunteer" faculty are paid with modest honoraria and see the opportunity to take the BAC's teaching courses free-of-charge as an incentive to teach at the BAC. Because the size of the bachelor's program is small, many of these faculty members teach only one course or co-teach current courses, and many have expressed a desire to increase their teaching responsibilities at the BAC. The College also anticipates modest new hires as needed and states that the Boston area offers substantial resources to support this need.

### *Library*

The BAC's library collection includes the major reference books and journals for landscape architecture, including recent publications and a collection of basic horticulture and ecological references. The BAC also belongs to consortiums and has developed partner agreements with local institutions in order to expand graduate-level materials and resources.

### *Physical Resources*

The BAC owns and occupies two integrated structures at 320-322 Newbury Street and 951 Boylston Street in Boston and leases recently renovated space on three floors at 100 Massachusetts Avenue nearby. The BAC has four teaching labs with 16 computers in each lab and a 25-station working lab available to all students. The computer labs are updated every three years with some of the older computers being recycled in a “rendering farm” to allow students to produce complex animations in a shorter time. The software, critical to the MLA program, is available for student use. ArcGIS is available in one of the teaching labs for the teaching and application of Geographic Information Systems, while all of the labs have AutoCAD, Sketchup, FormZ, Rhino, Revit, Artlantis, Photoshop, Piranesi and 3D Studio Max.

### ***Financial Resources (Attachment B)***

The BAC submitted a business plan that delineates projected enrollments, revenues, program direct costs and indirect costs for the period FY2009-10 through FY 2014-15, showing that revenue would exceed total cost by the second full year of enrollment of the proposed program.

## **EVALUATION**

### ***Visiting Committee***

The proposed program was evaluated by an external visiting committee comprised of Linda Jewell, Professor and Chair, Department of Landscape Architecture and Environmental Planning, University of California, Berkeley; Gene Bressler, Professor and Head, Department of Landscape Architecture, North Carolina State University; and Mark Lindhult, Professor and Graduate Program Director, Department of Landscape Architecture and Regional Planning University of Massachusetts, Amherst. The Visiting Committee reviewed the petition and appendices in preparation for the site visit, which took place July 10-11, 2009. During the visit, the Committee met with administrators, faculty, staff, and students; and toured the facilities.

The Visiting Committee commended BAC’s “...tradition of collaborative design education” and stated that the program has “...impressive potential...to not only bridge theory and practice but also to offer advanced study and research across design disciplines, including landscape architecture.” The Committee determined that all of the components of an outstanding MLA program presently exist at the BAC and made a number of recommendations to ensure that this potential is more clearly developed. All of the recommendations have a common theme: to develop a more explicit differentiation of the proposed MLA program from the existing BLA program. The Committee recommended that the College develop a specific mission statement of the proposed MLA program and its research focus; commit to increasing financial support of MLA students; support MLA faculty research and development, including hiring specifically for the MLA program; increase inclusion and oversight of research/scholarly agenda of the MLA curriculum; further develop masters-level requirements in the syllabi and expand the library’s offerings to support an expanded breadth of master’s-level research requirements.

### ***Institutional Response***

The BAC responded substantively to all of the Visiting Committee’s recommendations. The College revised the proposed MLA mission statement; outlined its commitment to research and identified landscape architecture as a priority in faculty research grants; hired an institutional advancement officer to assist in fundraising; updated syllabi to reflect graduate-level standards; expanded library offerings through partnerships with Tufts University, MIT, Harvard’s Science Library, Massachusetts College of Art and Design and other institutions; and resubmitted the budget reflecting changes made in response to Visiting Committee recommendations. The BAC

will hire a faculty member in ecology with a proven research background and expand the role of its advisory council.

Upon review of the institutional response, the Visiting Committee state that the MLA should be an excellent addition to the discipline of landscape architecture and look forward to watching the accomplishments of BAC graduates.

#### **PUBLIC HEARING**

The required public hearing was held in the Board of Higher Education office on October 13, 2009. No comments were offered in opposition to the proposed program.

#### **STAFF ANALYSIS AND RECOMMENDATION**

After a thorough evaluation of all documentation submitted, staff is satisfied that the proposed Master of Landscape Architecture at the Boston Architectural College meets the criteria set forth in 610 CMR 2.08(3) in the Degree-Granting Regulations for Independent Institutions of Higher Education, accredited by the New England Association of Schools and Colleges. Recommendation is for approval.

Attachment A: **Curriculum Guide**

<b>Major Required (Core) Courses (Total number of courses required = 26)</b>		
<b>Boston Architectural College Master of Landscape Architecture 3.15.09</b>		
<b>COURSES REQUIRED IN ALL CONCENTRATIONS</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
LA7104	LA Year One Seg. I	1
HT7101	Master's Design Principles Seg. I	3
LA7101	Foundation Design Masters A, Seg.I	3
LA7103	L-1 Analysis Intro to LA Seg.I (Prereq. LA7101)	3
LA7203	L-2 Concept and Synthesis Seg.I (Prereq. LA7103)	3
LA7302	Advanced LA Studio: Natural Systems, Seg. 2	3
AS7407	Topics in Social Structures, Seg. 2 (Neigh.Sts.-Urban Villages)	3
AS7222	Global Environmental Ethics, Seg. 2 or 3	3
AS7510	Landscape and the Imagination, Seg. 3	4
AS7415	Public Art	1
LA7303	Advanced LA Studio: Settlement/ Housing, Seg. 2	3
LA7304	Advanced LA Studio: Urban Infrastructure/Transit, Seg. 2	3
LA7305	Advanced LA Studio: Campus/ Institutional Planning, Seg. 2	3
LA7500	MLA Thesis Seminar and Studio Seg.3	6
LA7501	MLA Thesis Studio Seg.3	6
SKL7101	LA Sketch Problem Seg.1	1
SKL7202	LA Sketch Problem Seg.1 or Seg.2	1
SKL7303	LA Sketch Problem Seg.2 or Seg. 3	1
TM215	LA Materials and Methods Seg.1	1.5
TM302	LA Construction 1 Grading Seg.2	3
TM330	LA Construction 2 Drainage Seg. 2	3
TM405	LA Construction 3 Site Details/Structures Seg.3	1.5
TM360	Planting Design 1 Seg. 2 or 3	1.5
HT7315	LA History 1 Seg. 2 (prereq. PR 450 and Writing 2)	3
HT7415	LA History 2 Seg. 2 (prereq. PR 450 and Writing 2)	3
TM547	Professional Practice Seg. 3 (prereq. PR890)	3
	<b>Subtotal Major Required Credits</b>	<b>70.5</b>
<b>PRACTICE CREDITS</b>		
PC	Practice Credits (@1 credit. 100 hour)	45

	<b>Subtotal Practice Credits</b>	<b>45</b>
	<b>Total of Major and Practice Credits</b>	<b>115.5</b>
<b>Other Required Courses in Related Subject Areas (Total Courses Required = 12)</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
VS151	Design Media 1-Design Awareness Freehand Seg. 1	3
VS152	Design Media Orthogonal Drawing Seg. 1 (prereq. DM 1)	1.5
VS115	Perspective Drawing (prereq. DM 1)	1.5
VS655	Design Media Auto CADD 2-D Seg.1 (prereq. DM 1 and 2)	1.5
VS657	Design Documentation Auto CADD 3-D Seg.1 (prereq. DM 1 and 2)	1.5
VS650	Design Documentation Sketch-up 1	1.5
VS684	Intro to GIS	1.5
AS276	Hort. Sci. 1-Trees	3
AS299	Geology Landform	3
AS376	Hort. Sci. 2-Shrubs	3
AS7410	Social Science Research Methods	1.5
AS7576	Ecology/Native Plants (prereq. PR 450)	3
	<b>Subtotal Related Credits Required</b>	<b>25.5</b>
<b>Elective Courses (*Total credits required 0)</b>		
None		0
	<b>Subtotal Elective Credits Required</b>	<b>0</b>
<b>Curriculum Summary</b>		
Total number of courses required for the degree	38 Courses plus (4,500 hour or) 45 Credits in Practice	
Total credit hours required for degree	141	
<b>Prerequisite, Concentration, Dissertation or Other Requirements:</b>		

Attachment B: Budget

<b>Business Plan, MLA</b>													
10.3.08; 10.22.08; 10.08.09													
			2009-10		2010-11		2011-12		2012-13		2013/14		
<b>Enrollments</b>			Budget Line	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
		First Cohort (14)		10	8	6	5	5	5	5	4	4	
		Second Cohort			8	6	6	6	6	5	5	5	
		Third Cohort				5	4	3	3	3	3	3	
		Fourth Cohort					8	6	5	5	5	4	
		Sixth Cohort						5	4	3	3	3	
		Seventh Cohort							7	6	4	4	
		Eighth Cohort								5	4	3	
		Ninth Cohort									7	6	
		Tenth Cohort										6	
		Total semester tuitions	0	0	10	16	17	23	25	30	32	35	38
<b>Revenue</b>													
		Net Tuition per semester per student		9,067		9,611		10,188		10,799		11,447	
		<b>Revenue/ year</b>		<b>90,670</b>		<b>317,164</b>		<b>489,009</b>		<b>669,534</b>		<b>835,622</b>	
<b>Program Direct Costs</b>													
		Startup Promotion (8)											
		Brochure and poster design and printing *		12,500									
		Accreditation and CELA*		8,500		4,500		1,500		8,400		0	
		Direct Education Delivery Expenses											
		Stipends Core Faculty (2)*	5010	11,430		38,851		58,205		77,437		93,911	
		Stipends curriculum Development (3) *	5015	475		1,615		2,419		3,218		3,903	
		Faculty Teaching Materials (5)*	6000	880		2,991		4,481		5,962		7,230	
		Pro-rated cost of courses in other depts (9)											
		Design media(9) (18)		2,500		8,250		12,000		15,500		18,250	
		Foundation (Masters)(9) (19)		8,750		28,875		42,000		54,250		63,875	
		<b>subtotal educ delivery costs</b>		<b>45,035</b>		<b>85,081</b>		<b>120,605</b>		<b>164,767</b>		<b>187,169</b>	
		Educ Delivery as % of revenue		50		27		25		25		22	
		Direct admin costs (staffing) (see breakout)		88,700		141,586		182,785		188,268		193,916	
<b>Other direct costs</b>													
		Travel (domestic)(8)*	6180	1,750		1,803		1,857		1,912		1,970	
		Food/ bev (internal) (6)*	7147	310		1,054		1,579		2,100		2,547	
		Mailing/ Postage (10)*	7150	2,200		721		743		765		788	
		Printing (10) *	7175	1,200		1,236		1,273		1,311		1,351	
		Subscriptions (7)	7183	275		283		292		300		310	
		Professional memberships (7)	7185	1,900		1,957		2,016		2,076		2,138	
		Supplies, furn, equipt non-capit (7)	7200	400		412		424		437		450	
		Professional Development (7)	6510	1,725		1,777		1,830		1,885		1,942	
		Outside Services (7)	7300	900		927		955		983		1,013	
		Conferences (13)		8,400		8,652		8,912		9,179		9,454	
		Library materials (20) *		3,000		3,090		3,183		3,278		3,377	
		<b>TOTAL PROGRAM DIRECT COSTS</b>		<b>155,795</b>		<b>248,578</b>		<b>326,452</b>		<b>377,264</b>		<b>406,424</b>	
		<b>Program Expense Contingency (15)</b>		<b>10,000</b>		<b>37,287</b>		<b>16,323</b>		<b>18,863</b>		<b>20,321</b>	
		<b>GROSS MARGIN OF REV OVER PROG COSTS</b>		<b>-75,125</b>		<b>31,298</b>		<b>146,234</b>		<b>273,408</b>		<b>408,877</b>	

	% Revenue remaining after Total Prog Costs	-83%	10%	30%	41%	49%
<b>Indirect Program Costs</b>						
	Pro-rated admission costs (9)(16)*	2,500	8,250	12,000	15,500	18,250
	Pro-rated Practice Support (9)(15)*	2,085	6,881	10,008	12,927	15,221
	Office Space (11)	0				
	<b>Subtotal indirect costs</b>	<b>4,585</b>	<b>15,131</b>	<b>22,008</b>	<b>28,427</b>	<b>33,471</b>
	<b>TOTAL COSTS, DIRECT AND INDIRECT</b>	<b>170,380</b>	<b>300,996</b>	<b>364,783</b>	<b>424,554</b>	<b>460,216</b>
	SURPLUS OF REVENUE OVER TOT COSTS	-79,710	16,168	124,226	244,981	375,406

<b>09-10 Analysis</b>						
	Revenue not counting transfers	45,335				
	New expenses (asterisked)	46,830				
	<b>First Year: New Revenue - New Expenses</b>	<b>-1,495</b>				

## Staffing Breakout, MLA

9.16.08 10.8.09 C. Lamb						
	<b>2008 - 09</b>	<b>2009 - 10</b>	<b>2010 - 11</b>	<b>2011 - 12</b>	<b>2012 - 13</b>	<b>2013 - 14</b>
Administrative faculty		\$88,700	\$91,361	\$94,102	\$96,925	\$99,833
Ecology Faculty			\$50,225	\$88,683	\$91,343	\$94,084
<b>TOTAL</b>	<b>0</b>	<b>88,700</b>	<b>141,586</b>	<b>182,785</b>	<b>188,268</b>	<b>193,916</b>

**NOTES TO STAFFING BREAKOUT**

**Benefits and Inflation** All figures include 23% benefits and 3% annual raises.

1) **Administrative Faculty** Assume that half of the two, full time Landscape Arch staff are dedicated to the MLA @ \$70,000 per year (2008 rate for fulltime) plus benefits

2) **Ecology Faculty** Assume \$70,000 per year, Dec. 2011 start.

- GENERAL NOTES**
- \* Items not included in ongoing BLA budget
  - Inflation:** Tuition assumed to increase at 7% first year and 6% per year subsequently. No AOP tuitions computed. Revenues assumed to increase at 3% per year.
  - 1) Startup Promotion** cost of initial brochure. Ongoing marketing, promotion and admissions elsewhere
  - 2) Stipends core faculty:** figures are based on the average cost of stipends per year per BLA student (\$2,124 in 08-09)
  - 3) Curriculum Development:** Figures are based on the average cost of curric dev stipends per year per BLA student (\$95 in 08-09)
  - 4) Travel:** Figures are based on the average cost of travel per year per BLA student (\$95 in 08-09)
  - 5) Faculty Teaching materials:** Figures are based on the average cost per year per BLA student (\$176 in 08-09)
  - 6) Food and beverage:** Figures are based on the average cost per year per BLA student (\$57 in 08-09)
  - 7) No increase in costs, but MLA should pick up half of ongoing costs**
  - 8) Domestic Travel:** = 1/2 of 08-09 budget.
  - 9) Pro-rated costs** Based on departmental costs/ FTE times number of MLA students
  - 10) Assumes MLA will incur the same amount of costs in this area as the BLA**
  - 11) Staff for this program already have offices**
  - 12) Contingency** 20% year 1; 15% year 2, 5% year 3
  - 13) Conferences** Includes \$5000 for NOLA like conferences and \$3,400 for professional development
  - 14) First cohort** Assumes 5 of the entering class are transfers in from BAC- BLA population (those who already have degrees)
  - 15) Practice support** based on 07-08 estimate of \$500,000 budget for 1,200 students or \$417 per student
  - 16) Admissions support** based on 07-08 estimate of \$600,000 budget for 1,200 students or \$500 per student
  - 17) Admin computing support** based on 07-08 estimate of \$700,000 budget for 1,200 students or \$583 per student
  - 18) Design Computing classes** based on 07-08 estimate of \$600,000 budget for 1,200 students or \$500 per student
  - 19) Foundation classes** based on 07-08 estimate of \$350,000 budget for 100 students or \$3,500 per foundation student
  - 20) Library Materials** Figures represent increases in current library acquisitions, and include costs of individual access to the Tufts University collection. Current expenditures for landscape related resources are approximately \$7,000 per year.