

Board of Regents, State of Iowa

**REQUEST TO IMPLEMENT A “NEW” MASTER OF SCIENCE DEGREE PROGRAM IN
LANDSCAPE ARCHITECTURE**

THE PURPOSE OF ACADEMIC PROGRAM PLANNING: Planning a new academic degree program provides an opportunity for a Regent University to demonstrate need and demand as well as the university’s ability to offer a quality program that is not unnecessarily duplicative of other similar programs offered by colleges and universities in Iowa.

Institution: **Iowa State University**

Departments involved: Landscape Architecture

CIP Discipline Specialty Title: Landscape Architecture (BS, BSLA, BLA, MSLA, MLA, PhD),
Environmental Design/Architecture

CIP Discipline Specialty Number (six digits): 04.0601/04.0401

Level: B M X D FP

Title of Proposed Program: Master of Science in Landscape Architecture

Degree Abbreviation (e.g., Minor, B.S., B.A., M.A.): MSLA

Approximate date to establish degree: Month September Year 2010

Contact person(s): (name, telephone, and e-mail)

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Please provide the following information (use additional pages as needed).

1. Describe the proposed new degree program, including the following:
 - a. A brief description of the program and a statement of objectives including the student learning outcomes and how the learning outcomes will be assessed;

The proposed Master of Science in Landscape Architecture (MSLA) is a renaming of the department’s current MLA degree. We are currently recasting the existing MLA to become an accredited degree that prepares students for professional practice (separate proposal, on different University form). In changing the existing MLA to become accredited, the department at the same time does not want to lose its current advanced study degree. We therefore propose to essentially retain the existing degree but give it a new name, the Masters of Science in Landscape Architecture.

As is true of the current MLA, the MSLA will be an unaccredited research degree, focusing on research skills rather than practice skills and will be primarily targeted toward students who

already have a professional design degree and wish to gain additional credentials, research experience, and focused knowledge in landscape architecture. In general, students will study areas in which our faculty have special expertise (for example: vegetation management and ecological restoration, community and neighborhood design, watershed management, landscapes of waste and dereliction, cultural landscape preservation, and GIS modeling for landscape planning).

A detailed list of learning outcomes for advanced master's degree study are located at www.design.iastate.edu/FILES/Outcomes/master-la.pdf. Briefly summarized, these include:

Master's-level Learning Outcomes for Landscape Architecture

1. Enhance and Develop Advanced Thinking Skills

- Develop creative, imaginative approaches to solving problems and meeting perceived needs in landscape design, planning, management, and research
- Heighten abstract thinking skills (spatial thinking, visual and conceptual metaphors, etc) and integrative thinking skills to combine and apply concepts, ideas, and approaches from diverse and interdisciplinary sources
- Clearly justify and explain the rationale for making decisions about landscape design, planning, management, and research
- Develop knowledge of and insight into landscape theory, including perception, ecology, behavior, social change, landscape interpretation, etc.

2. Refine and Enhance Professional/Scholarly Communication Skills

- Clearly express thoughts, ideas, and information in verbal, written, and graphic form to communicate effectively with varied audiences, including scholars, professionals, non-LA professionals and the general public as necessary.

3. Understand, Apply and Develop Design Research Tools and Methods

- Understand existing tools, methods and technology and their advantages and disadvantages for effectively measuring site and landscape characteristics, site materials, client and stakeholder characteristics, etc.
- Understand and creatively apply quantitative and qualitative measurement skills and triangulation to landscape design, planning, management, etc.
- Understand and apply/integrate methodologies from other relevant disciplines for landscape design, planning, management, conservation, research, etc.

4. Undertake Research and/or Creative Work

- Review, evaluate, interpret, cite, and critically evaluate others' research in at least one area of the body of landscape-related literature and apply knowledge gained to one's own work.
- Develop, focus, and articulate a list of research issues, guiding questions, or hypotheses for a proposed project.
- Identify and collect, data or evidence needed to answer research question using an appropriate, developed methodology.
- Develop organizational skills to identify priorities and effectively manage time, funding, people, data, and other resources
- Present research results clearly and effectively in written, verbal and/or graphic format.

5. Explore Connections

- Explore relationships between landscape architecture and other disciplines via coursework.

- Apply knowledge, concepts and skills from undergraduate degree program and from work experiences to graduate studies
- Integrate knowledge from all courses in a summative, creative, individual project (creative component or thesis)

6. Partake of Academic Life

- Develop clear career goals that lead to selection of appropriate courses, POS committee members, and topic for thesis or creative component
- Develop a high level of scholarship in at least one aspect of landscape architecture for use in professional or academic career.
- Develop abilities for life-long learning.

7. Further Explore the Profession of Landscape Architecture

- Explore and appreciate the variety of future options in public, private, and academic practice.
- Expand awareness of current and future issues facing the profession to deepen norms of good practice.

While appropriate progress toward fulfillment of these goals will of course be evaluated through successful completion of ongoing coursework, learning outcomes will be primarily assessed by completion of a successful thesis or creative component, as determined by a program of study (POS) committee reviewing the work in progress and in a final oral examination.

- b. The relationship of the proposed new program to the institutional mission and how the program fits into the institution’s, college’s, and department/program’s strategic plan;

Landscape Architecture is increasingly becoming a research-based field as well as a practice-based activity, as society seeks new ways and new technologies to build environments in more sustainable ways. Our department has a long tradition in design-based research and outreach and has, over the past decade, led the College of Design in funded research. A research degree in landscape architecture has in the past and should in the future align well with the University’s mission in promoting science and technology as a Research I institution.

In addition, the College of Design’s current 2005-2010 Strategic Plan focuses on the continuing development of both graduate programs and faculty research. As the 2010-15 Strategic Plan develops, it is clear this is a focus that will only be heightened under the new dean. Retention of a research-based master’s degree program in the LA department is critical to our department’s participation in these goals. Finally, the degree will also support the department’s goals of increasing graduate students to support faculty research.

- c. The relationship of the proposed new program to other existing programs at the institution; describe how the proposed program will enhance other programs at the university.

While not exactly a new degree, the positioning of the MSLA as the department’s research-based degree for students with an undergraduate design degree should aid in the development of increased interdisciplinary study and proposed double degrees and co majors in the College of Design, initiatives currently being discussed. Both a double degree MLA/MCRP and M.Arch/MCRP already exist and a co

major degree (MSLA/M.S.Arch) is a logical next step, reflecting the increasing interdisciplinarity of the design fields and design practice. A MSLA/M.S.Arch co-major would be appealing to professionals in both disciplines who have a singular, accredited bachelor's degree in one discipline, as they could use their existing knowledge to leapfrog into advanced study in a related field.

It is perhaps also worth noting that the Landscape Architecture Department is seeking this degree name change in part because the Architecture Department is pursuing a similar name change for their degrees, re-designating their existing M.Arch.II degree to the Master of Science in Architecture. This change is based on the National Architecture Accreditation Board's (NAAB's) new standard naming practices to clarify the differences between the accredited professional degrees needed for practice and licensure (M.Arch and MLA) and research degrees (MSArch and MSLA). While such clarification is not yet mandated by the Landscape Architecture Accreditation Board (LAAB), discussions at the college level have indicated that degree parity may reduce both prospective student and accreditation team confusion.

- d. The relationship of the proposed new program to existing programs at other colleges and universities in Iowa, including how the proposed program is different or has a different emphasis than the existing programs; and

There are no other landscape architecture programs of any sort at any other college or university in Iowa.

- e. Special features or conditions that make the institution a desirable, unique, or appropriate place to initiate such a degree program.

Iowa State University has a long tradition in landscape architecture outreach, work currently being carried out via programs such as Extension to Communities, the PLaCE Program, and the TownCraft Center in Perry. These programs allow graduate students to work with faculty in conducting place-based research of direct benefit to Iowa's urban, suburban, and rural communities.

- f. Does the proposing institution have personnel, facilities, and equipment adequate to establish and maintain a high quality program?

As this degree proposal is actually a renaming of an existing degree, no resources are needed to establish this program, as existing resources currently furnish staff, facilities, and equipment for this ongoing program. Increasing faculty research and visibility of this research over the past years should also help increase graduate students and revenues from tuition to support the program.

- g. How does student demand for the proposed program justify its development?

We expect student demand to grow or at least remain steady (see Item 2, below). Historically, the existing MLA degree averaged about 10 students a year. Between 1996 and 2005, the department generated 44 research theses out of 49 graduates.

The proposed renaming of our current MLA degree to the MSLA is in part precipitated by market confusion between a first professional accredited degree and a second professional (unaccredited) or non-professional degree. Renaming the degree (while marketing an accredited 1st professional MLA) will address this confusion as well as increase the marketing of the degree to students interested in non-professional-practice careers in agencies, NGO's and other venues.

Enrollments in other programs remain high, in part due to ongoing growth in the profession (see Item 2, below):

Current Enrollments at Peer 11 Institutions

School	MLA/MSLA Enrollment	Degrees offered
University of Illinois at Urbana-Champaign	36	BLA/MLA/PhD
University of Minnesota	35	MLA/MSLA
Ohio State	Not Available	BLA/MLA
Michigan State	--	BLA only
North Carolina	67	BLA/MLA
Texas A&M	32	BLA/MLA/PhD
Arizona	Not applicable – Arch/LA Combined	MLA
Purdue	--	BLA only
Wisconsin	15	MSLA

Based on these peer institution comparisons, we anticipate having the potential to maintain an average enrollment of 15 in the combined MLA/MSLA program.

2. Describe the state and/or national workforce need and/or demand for graduates of the proposed program currently and in the near future (provide documentation about the sources of data used to estimate need and demand.)

We expect demand to remain steady or grow, based on predictions by both the profession and government sources.

A 2007 report prepared by the American Society of Landscape Architects indicates both strong demand for graduates, as well as present capacity within existing programs to accommodate some of that demand.

A review of projections for growth in landscape architecture compared to the number of graduates from degree programs suggests that the profession is growing at a rate well below that needed to meet expected demand. In his inaugural address at the Annual ASLA Meeting in Minneapolis, President Patrick Caughey, FASLA, issued a challenge to the practice and academic communities to accelerate the expansion of existing programs and the creation of new programs to address the shortfall. (ASLA, *Council on Education White Paper on Growing the Profession*, April, 2007)

According to the U.S. Department of Labor Bureau of Labor Statistics, in their *Occupational Outlook Handbook, 2010-11 Edition*, employment of landscape architects will increase at approximately 20 percent over the next decade, between 2008 and 2018. This rate is slightly higher than for architects, whose employment is projected to increase at about 16% (ftp://ftp.bls.gov/pub/special.requests/ep/ind-occ.matrix/occ_pdf/occ_17-1012.pdf; and [/occ_17-1011.pdf](ftp://ftp.bls.gov/pub/special.requests/ep/ind-occ.matrix/occ_pdf/occ_17-1011.pdf)). Report also notes that this rate of growth is

higher than the average rate of growth for all occupations. The profession has also gotten recent press as a “Green” profession, which may increase its appeal to students seeking degree programs. For example, the December 2009 issue of U.S. News and World Report ranked landscape architect as one of the fifty best careers in 2010 offering strong outlooks and high satisfaction.

3. List all other public and private institutions of higher education in Iowa currently operating programs similar to the proposed new degree program. (For comparison purposes, use a broad definitional framework, e.g., such identification should not be limited to programs with the same title, the same degree designation, having the same curriculum emphasis, or purporting to meet exactly the same needs as the proposed program.)

If the same or similar program exists at another public or private institution of higher education in Iowa, respond to the following questions:

- a) Could the other institution reasonably accommodate the need for the new program through expansion? Through collaboration?
- b) With what representatives of these programs has there been consultation in developing the program proposal? Provide a summary of the response of each institution consulted.
- c) Has the possibility of an inter-institutional program or other cooperative effort been explored? What are the results of this study? (Consider not only the possibility of a formally established inter-institutional program, but also how special resources at other institutions might be used on a cooperative basis in implementing the proposed program solely at the requesting institution.)

No other landscape architecture programs exist in the state of Iowa.

4. Estimate the number of majors and non-majors students that are projected to be enrolled in the program during the first seven years of the program.

Graduate Degree	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	4	6	8	8	8	8	8
Non-Majors	2	4	6	6	6	6	6

- a. What are the anticipated sources of these students?

The program is offered as a second professional (research) degree to students who already hold a first professional degree in landscape architecture or a closely related profession (e.g. architecture, urban planning), and to students seeking research related work in landscape architecture.

We expect the program to also be of interest to non-majors interested in landscape issues including architecture, natural resources, environmental planning, and history. For example, these would include engineering and architecture graduate students wishing to gain expertise in natural systems and “green” modes of construction, such as green roofs and stormwater garden design. Another example would be graduate students from programs and departments such as CRP, NREM, or Sustainable Agriculture taking courses focusing on the use of Geographic Information Systems (GIS) and the construction and management of restored landscapes.

5. If there are plans to offer the program away from the campus, briefly describe these plans, including potential sites and possible methods of delivery instruction.

Because the MSLA is not studio-based, as are the other LA degrees, there are possibilities for offering courses via distance education. Already, our faculty are offering distance-ed GIS courses for working professionals. Depending on students' interests, it could be possible to complete a degree by commuting or with limited residency.

6. Has the proposed program been reviewed and approved by the appropriate campus committees and authorities? List them:

LA Department Graduate Curriculum Committee; LA Department Faculty; College of Design Academic Affairs; College of Design Faculty; University Graduate Curriculum Committee; Faculty Senate Curriculum Committee; Faculty Senate.

7. List date the program proposal was submitted to the Iowa Coordinating Council for Post High School Education (ICCPHSE) and the results of listserv review.

(THIS WILL BE FILLED IN BY THE PROVOST OFFICE.)

8. Will the proposed program apply for accreditation? When?

No. This is designed as an unaccredited degree for students interested in pursuing landscape architecture as an area of scholarly interest.

9. Will articulation agreements be developed for the proposed program? With whom?

No articulation agreements are proposed for the MSLA at this time.

However, the department has agreements with Yeungnam University in Seoul, Korea and the University Putra Malaysia in Kuala Lumpur, and agreements with these schools might possibly be developed in the future.

10. Describe the faculty, facilities, and equipment that will be required for the proposed program.

As a renaming of an existing program, it will use existing faculty, facilities, and equipment in the College of Design. These include design studios and faculty offices in the college, as well as research spaces affiliated with faculty research projects, such as the Community Visioning space in the ISU Industrial Park where DOT grant projects are undertaken. As in the past, it is expected that research grant funding will provide equipment. As growth occurs in all collegiate graduate programs, based on the College's strategic plan, it is anticipated the master's programs in LA, like those in other college departments will require research space being proposed in the Armory.

11. From where will the financial resources for the proposed program come (list all that apply, e.g., department reallocation, college reallocation, grants, new to the university)?

SOURCES	TOTAL AMOUNT
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Departmental reallocation (1 FTE faculty)	\$100,000/year
Endowments (for TA's)	\$15,000/year
Grants (for RA's)	\$32,000/year
Tuition Scholarships (including Grants)	\$16,000/year

12. Estimate the total costs/total new costs (incremental increases each year in expenditures) that will be necessary for the next seven years as a result of the new program:

	TOTAL COSTS	TOTAL <u>NEW</u> COSTS
Year 1	\$120,000	0
Year 2	\$140,000	0
Year 3	\$160,000	\$50,000 (0.5 FTE)
Year 4	\$160,000	0
Year 5	\$160,000	0
Year 6	\$160,000	0
Year 7	\$160,000	0

Supplemental materials

(to be used at Iowa State University in the review of the proposal):

- 13. Program requirements, including:
 - a. prerequisites for prospective students;

The proposed MSLA curriculum remains similar to our existing MLA, requiring 36 credits of coursework and completion of a thesis or creative component, as approved by the student’s POS committee. At least 30 credits must be completed at the 500-level. The 36-credit total allows students to complete the coursework easily within 3 or 4 semesters of full-time and/or part time study, convenient for students wishing to work while studying. It is expected that students will concentrate their study in areas such as history-theory; design-art; ecology; hydrology; community design, etc., that supports their thesis or creative component.

MSLA: Students with First Professional Design Degree			
Year 1- Research Methods and Background			
Fall		Spring	
3	LA 541: Research Methods	9	Concentration Electives
12	Concentration Electives	3	LA 580 Thesis,Creative Component Tutorial
12	<i>Credits</i>	12	<i>Credits</i>
Year 2: Research and Focus on Concentration Area			
Fall		Spring (optional)	
3	LA 599 Creative Component or LA 699: Thesis Research	3	LA 599 Creative Component or LA 699: Thesis Research
3	Concentration Electives	3	Concentration Electives
6	<i>credits</i>	6	<i>credits</i>
36 credits total			

Periodically, students without accredited, first professional design degrees wish to complete an unaccredited master’s degree in landscape architecture. Usually these students have an interest in research in specialized topics central to landscape architecture (ecological design/sustainability, community visioning, landscape preservation, environmental advocacy, etc), but do not seek careers in traditional landscape architectural practice. We propose that students lacking a design degree be allowed to pursue an MSLA, provided they take an additional 12 credits of coursework, at least 6 of which must be an approved design studio, for a total of 48 hours of coursework. This requirement of courses at any level would give students a basic understanding of the design aspect of the field, yet allow them to easily complete a degree within 2 years.

MSLA: Students <i>without</i> First Professional Design Degree (same as above, with 12 additional credits of remedial design studies at any level, shown with asterisk).			
Year 1- Research Methods and Background			
Fall		Spring	
3	LA 541: Research Methods	6	LA 202 or other design studio*
6	Concentration Electives	3	LA 580 Thesis Tutorial
3	Remedial LA/Design Electives*	3	Remedial LA/Design Electives*
12	<i>Credits</i>	12	<i>Credits</i>
Year 2: Research and Focus on Concentration Area			
Fall		Spring (optional)	
3	LA 699: Thesis Research	3	LA 699: Thesis Research
9	Concentration Electives	9	Concentration Electives
12	<i>credits</i>	12	<i>credits</i>
48 credits total (36 graduate credits, 12 credits of design at any level)			

b. language requirements;

There is no foreign language requirement; foreign students must meet University TOEFL requirements.

c. courses and seminars presently available for credit toward the program;

Current 500-level course offerings in the department include:

- LA 501: LA Theory (3)
- LA 541: Research Methods (3)
- LA 567: Advanced GIS Modeling (3)
- LA 578A, 578B...578N: Special Topics (2-3)
- LA 582: Graduate Seminar (3) (renamed, revised for 2011-13 catalog)
- LA 590: Independent Study (var)
- LA 591: Environmental Law and Planning (3 cr)
- DSN S 564: Advanced Option Studio (6 cr)

We also hope to cross-list two CRP graduate-level GIS classes (CRP 552/553) with LA, since these classes are consistently taught by LA faculty for that department. Finally, over the next catalog cycle we anticipate that a few existing graduate courses (LA 562, LA 572, LA 565) will be dropped in favor of developing new graduate courses or increasing special topics courses listed as 578. These changes will allow us to easily meet student needs with existing faculty resources.

In addition, the MSLA will utilize existing graduate courses in other departments in the college and across campus, which is necessary and appropriate given the increasingly interdisciplinary nature of landscape architecture. Based on past students, the ability to take a variety of courses in departments outside of LA is usually of great interest and value to prospective students returning to school from practice. In the past, LA graduate students have taken :

500-level Courses fulfilling Concentration Elective requirements:

Arch 519: Middle Eastern Cities
Arch 527: History, Theory, and Criticism of Chinese Architecture
Arch 535: Advanced 3Dimensional Studio
Arch 567: Preservation, Rehabilitation, Restoration
Arch 528A, 528B...528E: Topical Studies in Architecture
Arch 571: Design for All People
Arch 575: Contemporary Urban Design Theory
CRP 504: Why Change Anything
CRP 545: Transportation Policy Planning
CRP 552: Geographic Data Management and Planning Analysis
CRP 553: Analytical Planning/GIS
CRP 584: Sustainable Communities
(and others in these departments, NREM, and other departments)

Finally, we expect current budget concerns will spur the development of increased interdisciplinary offerings within the college, particularly in terms of graduate level studios.

d. proposed new courses or modifications of existing courses;

(see previous answer)

e. thesis and non-thesis options in master's programs;

The MSLA requires a thesis or creative component. A non-thesis/creative component option is provided via a proposed accredited MLA.

f. implications for related areas within the university;

See part 1c. above

14. Attach to the program proposal memos from the department chair(s), the college dean(s), and other appropriate persons, agreeing to the allocation of new resources and/or the reallocation of resources as described in the Regents questions

No new resources are being requested.

15. Attach to the program proposal, letters of support, recommendations, and statements when appropriate: