Morgan State University



School of Graduate Studies Catalog 2014-2015

School and College Sections

School of Architecture and Planning

Provisions of this publication are not to be regarded as a contract between the student and Morgan State University.

Changes are effected from time to time in the general regulations and in the academic requirements. There are established procedures for making changes and procedures which protect the institution's integrity and welfare. A curriculum or graduation requirement, when altered, is not made retroactive unless the alteration can be accommodated within the span of years required for graduation. Additionally, because of space limitations in limited enrollment programs, Morgan State University may not be able to offer admission to all qualified students applying to these programs and/or class-sections.

Table of Contents

Introduction	_
OFFICERS OF ADMINISTRATION	4
Mission	4
Description of the Three Graduate Master's Programs	4
Accreditation	
MASTER OF ARCHITECTURE (M.ARCH.)	5
Statement of Accreditation	6
Advanced Standing and Portfolio Review	6
Admission and Transfer of Courses:	6
Portfolio Guidelines	
Requirements:	7
Program(s) of Study:	7
General Requirements	8
60-Credit Master of Architecture Degree Program	8
90-Credit Master of Architecture Degree Program	9
Three+Two (3+2) B.S.A.E.D M.Arch Program of Study	
MASTER OF LANDSCAPE ARCHITECTURE (M.L.A.)	12
Accreditation	13
Programs of Study:	
60/90-Credit Master of Landscape Architecture Degree Program	
Advanced Standing	15
Three + Two (3+2) B.S.A.E.D M.L.A. Program of Study	15
MASTER OF SCIENCE IN LANDSCAPE ARCHITECTURE (M.S.L.A.)	17
Objectives	
Program of Study	
MASTER OF CITY & REGIONAL PLANNING (M.C.R.P.)	
Program(s) of Study	
30-Credit Master of City & Regional Planning Degree Program	19
Three + Two (3+2) B.S.A.E.D. – M.C.R.P. Program of Study:	
COURSE DESCRIPTIONS	22
ARCHITECTURE	
CITY & REGIONAL PLANNING	26
ENVIRONMENTAL STUDIES	_
LANDSCAPE ARCHITECTURE	34

Introduction

This section of the *Morgan State University Graduate Catalog* includes the programs and course descriptions for the School of Architecture and Planning (SA&P). For the regulations governing graduate students, please go to the link *Regulations and Procedures*. The *Regulations and Procedures* section includes all the general information about admissions, enrollment, academic, financial awards, and the many other regulations and processes that pertain to graduate students.

General Information

General University information is published in the <u>Undergraduate Catalog</u>. This is also located on the Morgan State University Web site at the same link. The conduct code for all students is also published in this catalog, as well as information about financial aid available to all students (this includes the Federal PLUS loans).

Academic Calendar

The academic calendar is published in the Undergraduate catalog. However, the most current calendar reflecting additional events and any changes to the official calendar in the catalog, has been placed on the Morgan Web site at <u>Academic Calendar</u>. The current due dates for application or graduation, submission of theses and dissertations, comprehensive exams, and similar events important for graduate students is also published in this regularly updated calendar.

Other Information

The Web site for the <u>School of Graduate Studies</u> contains important announcements, including the published deadline dates for applications for admission for upcoming terms, deadlines for application for financial support (i.e., scholarships, fellowships, and assistantships), among other important announcement.

Student Responsibility

Every student is responsible for being familiar with the regulations, policies, and procedures pertaining to his or her curriculum, advising, academic progress, and responsible conduct as both a member of the Morgan community and as a member of a profession.

School of Architecture and Planning

OFFICERS OF ADMINISTRATION

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Mission

The mission of the School of Architecture & Planning (SA+P) is to develop diverse, socially and environmentally responsible, and enlightened professionals through a process of skill acquisition, critical thinking, and value definition. In so doing, SA+P pursues this mission within a creative environment of inquiry and collegiality in the fulfillment and advancement of spatial justice, urban revitalization and sustainability, and design for the everyday experience.

The School of Architecture & Planning offers masters degrees in Architecture, City & Regional Planning, and Landscape Architecture. SA+P also offers two undergraduate programs in Architecture and Environmental Design and Construction Management. Learning explorations bring students into direct contact with the diversity of people who live and work in urban areas. Student and faculty research is framed by issues through content areas such as planning and design theory, community and economic development, urban sustainability, historic and cultural preservation, information and construction technology, human behavioral sciences, social equity, environmental justice, professional practice, and leadership roles in the built environment professions.

Description of the Three Graduate Master's Programs

The three professional programs strive to provide national and international leadership in architecture, landscape architecture, and planning. Using the greater Baltimore-Washington region as a field of inquiry and practice, students have an excellent opportunity to gain exposure to the issues affecting the evolution and viability of cities worldwide. Course work is enriched by field trips to significant sites in New York City, Philadelphia, Washington, DC, and throughout the Baltimore area. In addition to the SA+P's programs and resources, students

enjoy ready access to nationally and internationally significant libraries, lecture series, and art galleries. The rich cultural environment offers access to many of the nation's and the world's leading institutions and to leaders in the design and planning professions. All three programs enjoy strong working relationships with professional offices, nonprofit organizations, and government agencies; and local and regional practitioners serve as adjunct faculty, guest critics, lecturers, and intern mentors. The School is one of only a small number of programs in the country offering fully accredited first professional degree programs with most design studios and classes available in the evenings. Graduate assistantships, through the Graduate School, as well as faculty research projects, are available to assist students financially.

Accreditation

All three programs offer professional degrees fully accredited by the appropriate national accrediting boards: the architecture program by the National Architectural Accreditation Board (NAAB); the landscape architecture program by the Landscape Architectural Accreditation Board (LAAB); and the planning program by the Planning Accreditation Board (PAB).

MASTER OF ARCHITECTURE (M.ARCH.)

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Objective

The Master of Architecture degree program has two primary goals within its mission: to prepare well educated professionals and to provide the context of Baltimore with a graduate program shaped to address the challenges of an urban setting. The program is designed for students who are actively employed in architectural offices (or other work) during the day and pursuing academic learning at the university during evenings and weekends, which allows students to support themselves while at the same time benefiting from internship experience with local architectural firms, if possible. While it is not a requirement to be employed while pursuing the graduate degree in architecture, the scheduling of course work is designed to facilitate external employment while studying. The program addresses urban issues in housing, health care, education, commerce and governance; the activities fundamental to the urban society and its built environment. These issues bring students in contact with the diversity of people who live and work in urban areas. Graduate architectural studies at Morgan are framed by considerations of urban design, city and regional planning, landscape design, historic preservation, information and construction technologies, and the behavioral sciences.

Course offerings include design, history and theory, professional practice, urban design, historic preservation, technology, visual communication including Building Information Modeling, preparing the graduate for licensure and leadership roles in architecture profession, as well as for employability in information technology-based professional enterprises. Graduates of the

program find meaningful employment in the greater Baltimore area as well as nationally and internationally. Graduates have joined established firms in various forms of private practice. Some have established professional practices and accepted positions in government or teaching.

The first professional degree in Architecture is designed to meet the needs of students with diverse backgrounds. At Morgan State University, the first professional degree is offered as a Master of Architecture degree.

Statement of Accreditation

The Master of Architecture is a fully accredited professional degree program leading to the opportunity for licensure as a professional architect within the United States.

The National Association of Architectural Accrediting Boards requires that the following statement be included, in its entirety, in the catalogues and promotional materials of all accredited programs:

"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 Accrediting Board (NAAB), which is the sole agency authorized to accredit United States 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 six-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 is not, by itself recognized as an accredited degree.

Advanced Standing and Portfolio Review

Admission and Transfer of Courses:

- Admission to the program in the initial stages is totally handled through the School of Graduate Studies. All the requirements prescribed in the Graduate Catalogue are to be adhered to before the application is ready for departmental review. The departmental review includes a portfolio review the following:
- PORTFOLIO: portfolios are reviewed for both admissions and for course placement.
- Students lacking prerequisite college-level math and physics are required to fulfill these course requirements before enrolling in the structures Technology course sequence.
- Conditional Acceptance: applications with an undergraduate GPA of less than 3.0 but above a 2.5 are considered on an individual basis.

Advanced standing is evaluated only after the student has been admitted. The advanced standing is limited to a maximum of 30 credits.

Portfolio Guidelines

All applicants are required to submit a portfolio. Every applicant wishing to seek an advanced placement in the 90 credits Master of Architecture program will be evaluated by the portfolio and application submittal. The portfolio is a compendium of work that tells the story of personal achievements, interests, skills and development in the area of visual, spatial and constructional abilities. The work should be identified as academic, professional or personal. If professional or team projects are included in the portfolio, the specific contribution of the applicant must be clearly identified. The portfolio must include an array of works that tells the visual story of applicant's personal journey. Please contact the Department of Architecture Chairperson for the most current description of portfolio guidelines, including the criteria for electronic submission (acceptable file format and size, etc.)

Requirements:

- Maximum size of eight and a half by eleven inches to contain no more than 15 double sided pages.
- Specific attention should be given to reproduction of high quality, appropriately scaled and sized images
- Labels and writing should be produced through word processing.
- All three dimensional works shall be photographed for inclusion in the portfolio.
- No slides or CD's are accepted.
- Additional portfolio information is available from the Department

Program(s) of Study:

The Graduate Program in Architecture is well meshed with the mission and goals of our larger institutional setting, that of Morgan State University. Our mission is an extension of the university's: furthering the education of African American students and others in preparation for the architectural profession, and, concurrently, engaging Baltimore's community through, through research, service learning and public programs.

The **60-Credit Master of Architecture Program.** Also described as a "four plus two" program, this degree program allows Bachelor of Science in Architecture and Environmental Design (BSAED) graduates, and other students with four year degrees in architecture or "pre-architecture" to earn the Master of Architecture degree with 60-credits of study. However admission is selective and students' with deficiencies in specific skill sets may be required to take additional coursework.

The **90-Credit_Master of Architecture Program** is an accredited professional degree that is intended for individuals who have completed a bachelor's degree with a major other

than architecture or a closely allied profession. As part of the two semester series of internship courses, students use this opportunity to seek employment with architectural offices.

Three Plus Two (3+2) Program: This accelerated course of study, the "three years plus two years" Master of Architecture degree program, accepts students on a competitive basis at the end of two years of undergraduate study in the BSAED program at Morgan State University, or after graduating from a community college with a two year degree program in architecture. Morgan State BSAED students may apply during spring semester of either their sophomore or junior years. Community college students may apply during the spring semester before graduating from the community college for acceptance to the program; community college students simultaneously apply to be "transfer students" into the BSAED program. Community college students can also elect to wait until their junior year as a transfer student at Morgan State to apply to this program.

On a practical level, the Graduate Program in Architecture is designed as an evening program for the working student. By virtue of being an evening program, our program is financially more accessible than a day program, as students can work for financial support while gaining valuable professional experience. Our program has a strong professional orientation and a highly diverse student population. Our students are actively encouraged to work with architectural firms in the City of Baltimore, following their first one or two semesters in our program.

General Requirements

Students in the Master of Architecture Degree Program must complete the required number of credit hours and submit an acceptable terminal design project.

Students must follow the Department of Architecture's Graduate Programs in Architecture Student Guidelines, published on-line, and pass a Comprehensive Design Review at the midpoint of the curriculum.

Students are expected to follow The Studio Culture Policy as adopted by the School of Architecture + Planning.

The following distribution of courses over a two or three-year period represents the sequence to be followed:

60-Credit Master of Architecture Degree Program First Year (Fall)

ARCH 501: Transitions in Architecture: Theory and Research	3
ARCH 530: Architectural Design III	6
URBD 511: Urban Design	6
ARCH 532: Architectural Technology IV (Structures)	3
(Sub) Total	15

First Year (Spring)	
ARCH 540: Architectural Design IV	6
ARCH 523: Environmental Controls	3
ARCH 541: Architectural Technology VI (Integrated Intelligent	t Detail) 3
Elective One: Required History and Theory of Architecture Ele	ective3
(Sub) Total	15
Second Year (Fall)	
ARCH 550: Architectural Design Studio V	6
ARCH 771: Terminal Design Project Seminar	3
Elective Two	3
Elective Three	3
(Sub) Total	15
Second Year (Spring)	
ARCH 772: Architectural Design Studio VI (Terminal Design P	roject) 6
ARCH 561: Architectural Practice, Law and Management	3
Elective Four	3
Elective Five	3
(Sub) Total	15
Total Credit Hours	60
90-Credit Master of Architecture Degree Program	
First Year (Fall)	
ARCH 501: Transitions in Architecture: Theory and Research	3
ARCH 510: Environmental Design I	6
ARCH 513: Architectural Technology I (Statics)	3
ENST 512: Graphics Workshop	3
(Sub) Total	15
First Year (Spring)	
ARCH 520: Architectural Design II	6
ARCH 511: Built Environment History I	3
ARCH 522: Architectural Technology II (Structures)	3
ARCH 533: Architectural Technology V (Building Materials)	3
(Sub) Total	15
Second Year (Fall)	
ARCH 530: Architectural Design III	6
URBD 511: Urban Design	3
ARCH.521 Built Environment History II	3
ARCH 532: Architectural Technology IV (Structures)	3

(Sub) Total	15	
Second Year (Spring)		
ARCH 540: Architectural Design IV	6	
ARCH 523: Architectural Technology III (Environmental	l Controls) 3	
ARCH 541: Architectural Technology VI (Integrated Integrated Integ	•	3
Elective One: Required History and Theory of Architect		
(Sub) Total	15	
Third Year (Fall)		
ARCH 550: Architectural Design Studio V	6	
ARCH 771: Terminal Design Project Seminar	3	
Elective Two	3	
Elective Three	3	
(Sub) Total	15	
Third Year (Spring)		
ARCH 772: Architectural Design Studio VI (Terminal De	esign Project)	6
ARCH 561: Architectural Practice, Law and Manageme		
Elective Four	3	
Elective Five	3	
(Sub) Total	15	
Total Credit Hours	90	

Three+Two (3+2) B.S.A.E.D.- M.Arch Program of Study

There are two entry paths to the "3+2" Master of Architecture Degree Program, as an undergraduate major in Environmental Design and Architecture at Morgan State University, or as a transfer student from a community college with an articulation agreement with Morgan State University.

After completing an approved three-year undergraduate curriculum sequence, 3 + 2 Master of Architecture degree students take the following courses to complete the degree:

Summer Preceding Graduate Study:

HIST 350 (CI): Intro to African Diaspora	3
PHIL 109 (CT): Intro to Logic	3

Graduate: First Year (Fall)

ARCH 501: Transitions in Architecture: Theory and Research	3
ARCH 530: Architectural Design III	6
URBD 511: Urban Design	3

ARCH 532: Architectural Technology IV (Structures) (Sub) Total	3 15	
Graduate First Year (Spring)		
ARCH 540: Architectural Design IV	6	
ARCH 523: Environmental Controls	3	
ARCH 541: Architectural Technology VI (Integrated Intellige	ent Detail)	3
XXX (AH): AH-General Education Requirement	3	
(Sub) Total	15	
Graduate Summer		
Graduate elective (Optional Studies)	3	
Graduate elective (Optional Studies)	3	
Graduate Second Year (Fall) ARCH 550: Architectural Design Studio V ARCH 771: Terminal Design Project Seminar Graduate Elective (Non-Architecture) Elective (Optional Studies) (Sub) Total	6 3 3 3	
Graduate Wintermester		
Graduate Elective (Architecture)	3	
Graduate Second Year (Spring)	Dunain at \	6
ARCH 772: Architectural Design Studio VI (Terminal Design	• •	6
ARCH 561: Architectural Practice, Law and Management	3	
Graduate Elective (Non-Architecture)	3	
Elective (Optional Studies)	3	
(Sub) Total	15	

Total credits will be a combination of undergraduate and graduate credits, with a minimum of 30 credits at the graduate level. Contact program director for more details.

Students with Bachelor of Science in Architecture, or Bachelor of Architecture (equivalent) can be waived up to the first 30 credits of the program by individual review.

Students interested in the accelerated 3+2 Master of Architecture curriculum should contact the School of Architecture & Planning for application procedures and curriculum.

MASTER OF LANDSCAPE ARCHITECTURE (M.L.A.)

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Objective

The First Professional Degree Program in Landscape Architecture is a fully accredited, professional program that focuses on the design of the urban environment. The course work focuses on investigating aesthetic, ecological, and social/cultural concerns as a means of establishing sustainable urban communities. Within this philosophical context, the Program is designed to heighten the student's sensitivity to, and knowledge of the skills and values fundamental to the landscape architecture profession.

The Graduate Program in Landscape Architecture provides national leadership in the study of cultural, design and environmental issues that affect underserved urban communities. The greater Baltimore-Washington region serves as a field of inquiry and practice for faculty and students to gain real-world urban practice. Additionally, course work is enriched by field trips to significant sites in New York City, Boston, Philadelphia, Washington, DC, and throughout the east coast area. Design studios address issues such as enriching community life in redeveloping neighborhoods, renovating the pedestrian realm, enhancing public spaces, and solving urban environmental problems within these and other urban project realms. Recent studio projects in real-world community settings have included: urban strip shopping center revitalization, transit and greenway development, community park/playground design, regional park design, public plaza design, and urban in-fill housing site design. Students are also exposed to various career avenues through contact with professional offices, public agencies, and community organizations.

The Program is dedicated to framing landscape architecture study areas (design studio, history/theory, technical skills, technology/media, environmental resources, community service) through the development of critical thinking and analysis skills. Students are challenged in both design studio and seminar courses to develop relevant concepts and ideas. In particular, the design studio sequence builds these critical thinking skills as the physical scale, human functional program, and complexity of the urban context increases from Studio I through Studio VI. A variety of software and 3-D modeling programs are employed to support design studio learning and communication.

The First Professional Degree Program is intended for students who have an undergraduate degree that is NOT a professional degree in Landscape Architecture.

Accreditation

The First Professional Degree Program is a fully accredited program by the Landscape Architecture Accreditation Board (LAAB) of the American Society of Landscape Architecture (ASLA). In the State of Maryland, graduates from an accredited graduate program are eligible after three years of full-time, professionally supervised employment to take the national Landscape Architecture Registration Exam (LARE).

Programs of Study:

The schedule listed below is the suggested sequence of study for completing all ninety (90) credit hours of course work required for the MLA degree within a three-year time frame. In order to qualify for graduation with the MLA degree, all degree requirements listed below must be completed within seven (7) years from the date of admission to the School of Graduate Studies. Students with Programs of Study less than 90 credit hours must complete the required Program of Study set forth at the time of admission within the same period.

Three MLA Programs of Study are available:

90-credit M.L.A. Program of Study:

Students who have a bachelor's degree in ANY MAJOR and are initiating their first studies in a professional landscape architecture degree are eligible to apply to this program. To receive the MLA degree, students must complete all the course work as listed below and submit and defend an acceptable Thesis or Masters Degree Project. A design portfolio is not required for this program option, but is accepted by the Department if one is available. Students who possess significant professional and/or educational experience may be eligible for a reduction of required credit load for graduation upon review with the Department Chair and documented approval of an amended Program of Study.

60-credit M.L.A. Program of Study:

Students who hold a four-year college degree in a closely related design field (e.g., Architecture, Urban Planning and Design, Environmental Design, Landscape Design) that is comparable to 30 of the 90 credits in the program outlined below are eligible to apply to the 60-credit MLA program of study. Acceptance into this program requires the applicant to submit and receive approval from the Landscape Architecture Faculty for (1) catalog descriptions (and syllabi, if possible) of courses to be considered as equivalent to courses in the program and (2) a design portfolio.

Three + Two (3+2) B.S.A.E.D. – M.L.A. Program of Study:

Students who are in good standing within the School of Architecture + Planning's Bachelor of Architecture & Environmental Design (BSAED) and wish to pursue the MLA degree in coordination with the undergraduate (BSAED) program may be eligible for this Program Track. Advanced placement in the program is designed to allow BSAED graduates to achieve the Master of Landscape Architecture degree as a three year (undergraduate BSAED degree) plus two year (graduate MLA degree) course of study. Details on this program can be obtained from the Department Chair.

60/90-Credit Master of Landscape Architecture Degree Program	
FIRST YEAR (FALL)	
LAAR 510: Landscape Architecture Studio I	6
LAAR 512: Graphics Workshop	3
LAAR 513: Environmental Resources I	3
(Sub) Total	12
FIRST YEAR (SPRING)	
LAAR 520: Landscape Architecture Studio II	6
LAAR 522: Technology I: Grading & Drainage	3
LAAR 511: History I: History of Landscape Architecture	3
ENST 770: Digital Graphics Workshop (CAD & Representation)	3
(Sub) Total	15
FIRST YEAR (Summer Between 1st and 2nd year)	
ENST 739: Design and Human Behavior	3
LAAR 523: Plant Materials	3
(Sub) Total	6
SECOND YEAR (FALL)	
LAAR 530: Landscape Architecture Design Studio III	6
LAAR 532: Technology II: Materials & Methods	3
LAAR 551: History II: Contemporary Urban Landscape Design	3
LAAR 525: (GIS) Geographic Information Systems for Land. Arch	ı. 3
(Sub) Total	15
SECOND YEAR (SPRING)	
LAAR 540: Landscape Architecture Studio IV	6
LAAR 532: Technology III: Advanced Site Construction	3
LAAR 552: Planting Design	3
LAAR 533: Environmental Resources II	3
(Sub) Total	15
THIRD YEAR (FALL)	
LAAR 550: Landscape Architecture Studio V	6
LAAR 751: Research Methods	3
Elective	3
Elective	3
(Sub) Total	15
() 10001	

THIRD YEAR (SPRING)

NOTE: Student, regardless of Program of Study, must select Master's Project Option (I) or Master's Thesis Option (II)

Option I: Master's Project Option

LAAR 560: Landscape Architecture Studio VI: Master's Project 6

(Sub) Total	12
Elective	3
LAAR 561: Landscape Architecture Practice	3
LAAR 799: Thesis Seminar	3
LAAR 789: Supervised Research	3
Option II: Master's Thesis Option	
(Sub) Total	12
Elective	3
LAAR 561: Landscape Architecture Practice	3

Note: All electives must have approval of the Department Chair or designated Faculty Advisor. The elective must supplement the unified LAAR program of study.

Advanced Standing

Applicants may submit a portfolio for review by the Department Chairperson and/or Department Faculty in support of admission to the program as well as advanced standing.. Every applicant wishing to seek an advanced placement in the 90 credits Master of Landscape Architecture program will be evaluated by the portfolio and application submittal. The portfolio is a compendium of work that tells the story of personal achievements, interests, skills and development in the area of visual, spatial and constructional abilities. The work should be identified as academic, professional or personal. If professional or team projects are included in the portfolio, the specific contribution of the applicant must be clearly identified. The portfolio must include an array of works that tells the visual story of applicant's personal journey. Please contact the Department Chairperson for the most current description of portfolio guidelines, including the criteria for electronic submission (acceptable file format and size, etc.)

Three + Two (3+2) B.S.A.E.D M.L.A. Program of Study Summer Preceding Graduate Study:	
LAAR 523: Plant Materials & Identification	3
PHIL 109 (CT): Intro to Logic	3
Graduate: First Year (Fall)	
LAAR 530: Landscape Architecture Studio III	6
LAAR 532: Technology II: Materials & Methods	3
LAAR 551: History II: Contemporary Urban Land. Design	3
XXX (AH): AH General Education Requirement	3
(Sub) Total	15
Graduate First Year (Spring)	
LAAR 540: Landscape Architecture Studio IV	6
LAAR 533: Environmental Resources II	3
LAAR 541: Technology III: Adv. Site Construction	3

HIST 350 (CI): Intro to African Diaspora	3
(Sub) Total	15
Graduate Second Year (Fall)	
LAAR 550: Landscape Architecture Studio V	6
LAAR 751: Research Methods	3
Elective	3
Elective	3
(Sub) Total	15
Graduate Second Year (Spring)	
LAAR 560: Landscape Architecture Studio VI	6
LAAR 561: Landscape Architecture Professional Practice	3
LAAR 525: Geographic Information Systems	3
LAAR 552: Planting Design	3
(Sub) Total	15

Total credits will be a combination of undergraduate and graduate credits, with a minimum of 30 credits at the graduate level. Contact department for more details.

MASTER OF SCIENCE IN LANDSCAPE ARCHITECTURE (M.S.L.A.) (Advanced Professional M.S.L.A. Degree Program)

Objectives

The Program is designed to provide advanced students the opportunity to enhance their prior academic and/or professional work experience with focused study in design theory/history, environmental resources, urban infrastructure or urban sustainability. Students entering this program of study are encouraged to build their course work from the wealth of courses in the other School of Architecture and Planning accredited graduate degree programs, architecture and city and regional planning, as well as form relevant departments throughout the University. This is a three-semester, 36-credit program for those who already possess a professional degree in landscape architecture from an accredited university in North America. The entering M.S.L.A. student is expected to exhibit a focused research area of study. The Department Chair and /or designated faculty advisor will work with students to craft a course of study meeting their advanced academic interest. For this reason, students are required to take LAAR 788-Supervised Research their first semester in the program. Inclusive in the suggested curriculum listed below, students are required take four elect course that must meet the approval of the Department Chair and/or the designated faculty advisor.

The student must complete the Master's Thesis as part of the program of study. The Thesis must meet all of the requirements for completing a thesis as outlined in the School of Graduate Studies' *Dissertation/Theses Handbook* and must be approved by the School of Graduate Studies and the Graduate Department of Landscape Architecture prior to graduation.

Program of Study

The schedule listed below is the suggested sequence of study for completing all 36 credits of course work required for the **M.S.L.A.** degree within a three-semester period. In order to qualify for graduation with the M.S.L.A degree, all degree requirements listed below must be completed within five (5) years from the date of admission to the School of Graduate Studies.

FIRST YEAR (FALL) LAAR 540:

LAAR 540: Landscape Architecture Studio IV	6
LAAR 788: Supervised Research	3
LAAR 751: Research Methods	3
(Sub) Total	12

FIRST YEAR (SPRING)

LAAR 550: Landscape Architecture Studio V	6
Elective (Focus Area)	3
Elective (Research/Theory)	3
(Sub) Total	12

SECOND YEAR (FALL)

LAAR 789: Supervised Research 3

LAAR 799: Thesis Seminar	3
Elective (Focus Area)	3
Elective (Focus Area)	3
(Sub) Total	12

MASTER OF CITY & REGIONAL PLANNING (M.C.R.P.)

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According to the Association of Collegiate Schools of Planning, planning is a systematic, creative way to influence the future of neighborhoods, cities, rural and metropolitan areas, and even the country and the world. Urban and regional planners use their professional skills to serve communities facing social, economic, environmental, and cultural challenges by helping community residents to: 1) develop ways to preserve and enhance their quality of life, 2) find methods to protect the natural and built environment, 3) identify policies to promote equity and equality, 4) structure programs to improve services to disadvantaged communities, and 5) determine methods to deal effectively with growth and development of all kinds. Our mission is to educate diverse and underrepresented student groups in the planning profession and related fields for careers in public, private, and non-profit sectors. Building on the tradition of providing professional education for African American students at a HBCU, and the University's urban mission, the faculty and students will make meaningful contributions to the urban communities. The Department is committed to improving urban communities in Baltimore region and beyond and serves as the leading partner for the University's Morgan Community Mile initiative, to improve the quality of life for neighborhoods in Northeast Baltimore. We also use the greater Baltimore and Washington regions as a laboratory for applied research and student projects. The Program is fully accredited by the Planning Accreditation Board (PAB).

Program(s) of Study

The program leading to the Master of City and Regional Planning consists of 48 total semester credits (30 core credits and 18 elective credits) of coursework, normally requiring the equivalent of two years full-time graduate study to complete. Students can specialize in one of the following areas: Community and Economic Development, Transportation and Infrastructure Planning, or Urban Design and Sustainability. A generalist option is also available.

The following is the core curriculum of the program.

30-Credit Master of City & Regional Planning Degree Program First Year (Fall)

CREP 501: Principles and Practices of City & Regional Planning	3
CREP 513: History of City & Regional Planning	3
CREP 521: Computer and Data Applications for Planners	3
(Sub) Total	9

First Year (Spring)

CREP 510: City & Regional Planning Studio I 3

CREP 523: Quantitative Analysis and Methods for Planners CREP 512: Urban Economics for Planning	3
(Sub) Total	9
Second Year (Fall)	
CREP 520: City & Regional Planning Studio II	3
CREP 792: Thesis Research and Professional Report Preparation	າ 3
(Sub) Total	6
Second Year (Spring)	
CREP 522: Land Development Law	3
CREP 794: Professional Project in City and Regional Planning	
OR	
CREP 799: City & Regional Planning Thesis Seminar	3
(Sub) Total	6
Electives (18 credits)	

The remaining 18 credits may be taken among the electives offered in the Department of City and Regional Planning and/or the university as a whole. Students also have the option to take a maximum of two electives at surrounding universities in the metropolitan Baltimore area. Electives not taken within the Department of City and Regional Planning must meet with the chair's approval.

Three + Two (3+2) B.S.A.E.D. – M.C.R.P. Program of Study:

An accelerated 157 credit BSAED/MCRP program is open to qualified BSAED students at the end of their second year of studies. Students must be conditionally admitted to the program at the end of their 2nd year in order to be considered for admission to the 3+2 program. Students must submit a writing sample to the City and Regional Planning Department. The writing sample should consist of an 8-10 page term paper written for a course in the major.

Summer Preceding Graduate Study: 3 PHIL 109 (CT): Intro to Logic **Graduate: First Year (Fall)** ARCH 403: Urban Design I 6 3 CREP 513: History of City and Regional Planning CREP 521: Computer & Date Application for Planners 3 HIST 350 (CI): Intro to African Diaspora 3 (Sub) Total 15 **Graduate First Year (Spring)** ARCH 404: Urban Design II 6 CREP 510: City and Regional Planning Studio I

3

CREP 523: Quantitative Analysis and Methods XXX (AH): AH General Educatio (Sub) Total	3 on Requirement 3 15
Summer	
Elective^	3
Elective^	3
(Sub) Total	6
Graduate Second Year (Fall)	
CREP 520: City and Regional Planning Studio II	3
CREP 792: Thesis Research & Professional Report P	rep 3
Elective^	3
Elective^	3
(Sub) Total	15
Graduate Second Year (Spring)	
CREP 522: Land Development Law	6
CREP 794/499: Professional Project in CRP or Thesis	s in CRP 3
Elective^	3
Elective^	3
(Sub) Total	15

[^]Graduate Electives may be chosen from the electives offered in the department, School of Architecture and Planning, and University at-large with the consent of the department chair.

SCHOOL OF ARCHITECTURE & PLANNING

COURSE DESCRIPTIONS

ARCHITECTURE

ARCH 501: Transitions in Architecture: Theory and Research

Two Hours: 3 credits

This hybrid gateway course introduces the philosophy behind architectural design. Students interactively study topics selected from the history of architecture, theory, context, urbanism, and concepts of design. Students are prepared for advanced design and research projects in the following semesters.

ARCH 510: Environmental Design I

Ten Hours: 6 Credits

This studio is an introduction to the vocabulary and tools of the built environment professional through an interdisciplinary studio for all first year architecture students. The course is designed to move students from an initial view of their personal values and environment to a more expansive view of values and environments of others. Students will also be introduced to contemporary trends of the built environment professions, basic problem solving and visual communication skills. Using Baltimore as a laboratory, students will analyze through drawings, models and diagrams, the interrelated complexities of forms, spaces and structures of the city. Prerequisite: Co-requisite (or pre-requisite) ARCH 501

ARCH 511: Built Environment History I

Three Hours: 3 Credits

An introduction to the historic foundations of built form, including settlement patterns and indigenous building types. Beginning with Egyptian architecture, continuing to the philosophical start of the Renaissance, and concluding in 1750, this course is a foundation in the history and theory of architecture that develops an understanding of the close relationship between social forces and the forms of architecture. Prerequisite: Admission to program.

ARCH 513: Technology I (Statics and Strength of Materials)

Three Hours: 3 Credits

This course is devoted to the development and application of the principles of static mechanics and strength of materials as they relate to the analysis of building structures. Prerequisites of physics and mathematics through college algebra are required. Prerequisite: Admission to program.

ARCH 520: Architectural Design Studio II

Ten Hours: 6 Credits

The architecture students are introduced to a familiar environmental package of the home and adjacent landscape. The intention of the course is to teach students to design residences and communities based on an understanding of the form and structures of urban home and community prototypes. Emphasis will be placed on developing design criteria through the analysis of conditions, needs, aspirations and resources of the resident's-environment. Attention Will be given to the role of the residential neighborhoods in the city by understanding the elements that produce the satisfying urban home and residential community. Prerequisite: ARCH 510.

ARCH 521: Built Environment History II

Three Hours: 3 Credits

Building on the concepts of ARCH 511 Built Environment History I, this course is an introduction to architectural and urban design history from 1750 to contemporary times with an emphasis on world architecture and the significance of multicultural architectural traditions. The development of specific built form topologies is studied, including patron residential, religious, civic structures, and urban space. Emphasis will be placed on two specific areas. The first is to identify significant architects, their theories and buildings; the second is to look at how cities evolved, adapting to new uses and styles of habitation. Prerequisite: ARCH 511.

ARCH 522: Architectural Technology II (Building Systems-Structures)

Three Hours: 3 Credits

The purposes of this course are (1) to develop the student's skills and techniques in the design of basic elements of various wood and steel structural systems; (2) to expand their understanding of the principles and characteristics of various structural materials; and (3) to enhance his/her ability to resolve structural problems of cost, durability, space, legal restrictions, time and aesthetics. Prerequisite: ARCH 513.

ARCH 523: Architectural Technology III (Environmental Controls)

Three Hours: 3 Credits

The purposes of this course are to expand the students' understanding of the nature and characteristics of various environmental systems as well as to develop their ability to make choices between systems that best resolve the problems of cost, social accommodation, operating efficiency, durability, scheduling, safety, and aesthetics. Prerequisite: Admission to program.

ARCH 530: Architectural Design Studio III

Ten Hours: 6 Credits

As a continuing study of an urban neighborhood, students will be introduced to commercial and/or institutional forms and their contexts. Students will explore various issues related to the programming, planning and designing of various types of commercial and institutional establishments. Emphasis will be placed on the requirements, analyzing various environmental concerns, planning considerations and jointly developing design solutions that address architectural and landscape architectural requirements. The course will be organized into a sequence of design problems. Prerequisite: ARCH 520.

ARCH 532: Architectural Technology IV (Building Systems-Structures)

Three Hours: 3 Credits

This course is a continuation of Architectural Technology III and is designed to (1) develop students' skills and techniques in the, design of basic elements of various concrete structural systems; (2) expand their understanding of the principles and characteristics of various structural materials; and (3) enhance their ability to resolve structural problems of cost, durability, space, legal restrictions, time and aesthetics. Prerequisite: ARCH 522.

ARCH 533: Architectural Technology V (Building Materials)

Three Hours: 3 Credits

In this course, students learn to evaluate selected sets of building materials. Additionally, students will be required to apply their analytical skills to the selections of materials for a selected project. Emphasis will be given to the relationship between design and construction. Although the analytical process to be taught can be universally applied in material selections, the focus will be on those materials and tech-

niques commonly used in the Central Atlantic Region of the United States. The principles of specification writing and existing CSI standards are introduced and applied on specific assignments. Prerequisite: Admission to program.

ARCH 540: Architectural Design Studio IV

Ten Hours: 6 Credits

The intent of this studio is to explore design approaches to multi-use public facilities. Assignments and design problems will require the students to use their experiences in data collection and analysis in developing design approaches for multi-use facilities. Problem statements will be developed in concert with current needs of selected municipalities. Specific emphasis will be placed on having the students develop extensive sets of presentation documents outlining structural, environmental and spatial character of the built form(s) they create. Prerequisite: ARCH 523, ARCH 533, ARCH 541, ARCH 530, URBD 511

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ARCH 541: The Integrated Intelligent Detail

Three Hours: 3 Credits

This course is structured for students to learn about architectural details and building systems, and to be able to design details, that reflect new developments in design and construction, such as integrated project delivery and sustainability. The course will focus on an overview of how the major components of a building fit together, the rationales behind their construction, and the methods of graphically describing these concepts, including Building Information Modeling (BIM). Pre-requisite: ARCH 530.

ARCH 545: Comprehensive Design Studio

Ten Hours: 6 Credits

This design studio course strengthens the student in comprehensive design skills. The educational focus of this architectural design studio is to deepen the student's preparation for the Comprehensive Design Review (CDR), which is a departmental review of student progress towards the professional degree in architecture at the graduate level.

ARCH 550: Architectural Design Studio V

Ten Hours: 6 Credits

This studio addresses comprehensive design competency, including the integration of structures, materials, and sustainability in the design of a complex building, dealing with larger-scale development in the Baltimore metropolitan region. It is the intention that the site and the context of the problem force the designer to consider mixed, residential and commercial uses. The quality and standard of physical design synthesis will play major role in determining the ultimate viability for future development. Prerequisite: ARCH 523, ARCH 533, ARCH 540, ARCH 541, URBD 511.

ARCH 561: Architectural Practices, Law and Management

Three Hours: 3 Credits

The objective of this course is to explore the roles, relationships, and legal responsibilities of an architect. The architect's professional interaction with consultants, owners, contractors and the various governmental authorities that regulate the building industry will be discussed. The fundamentals of professional practice and ethics, as well as various management tools will also be explored. Prerequisite: ARCH 550.

ARCH 602: American Architecture Periods, Styles and Movements Three Hours: 3 Credits

This course examines American architecture from the late 18th, 19th and 20th century, not as an insular phenomenon, but as part of a transnational history of architectural periods, styles and movements. While the course focuses on buildings and architectural projects constructed within the national boundaries of the United States of America between 1776 and the present, this focus necessarily also involves a wider historical and geographical scope, including the North Atlantic region as a cultural sphere; the architecture of colonizing powers, especially England; international codes of classical and modernist architecture emanating from Europe; and the architecture of regions eventually conquered by the United States, especially in the southwest. *Prerequisite: For students matriculated in the M.Arch. degree program, ARCH.521 History of the Built Environment II. For external students, permission of the instructor or Department Chair.*

ARCH 603: Historic Preservation Materials & Technology

Three Hours: 3 Credits

This course examines common historical and contemporary building materials and technologies with the intention of understanding their basic properties, the ways they have been transformed into building elements, assemblies and systems, typical causes for their changes over time, and protocols for their conservation. The principal product of the class is a comprehensive and detailed building investigation, known as a Historic Structure Report, on an historic structure. *Prerequisite: Permission of the instructor or Department Chair.*

ARCH 604: Historic Preservation Documentation

Three Hours: 3 Credits

This course is an advanced seminar/studio, designed to train students in the Historic American Building Survey (HABS) techniques through supervised reading, fieldwork, and writing. Course work introduces students to the skills needed to conduct research, photograph and document both in written and graphic form. Emphasizing efficiency and accuracy in its consideration of sources, methods and techniques, discussion helps students develop reasonable research questions and carefully evaluate evidence. To test the approaches and sample the sources introduced during the semester, students in the seminar participate in a research project to document a particular historic structure or group of historic structures. *Prerequisite: ENST.601 as a prerequisite or co-requisite; permission of the instructor or Department Chair.*

ARCH 738, 740, 741, 742, and 743: Seminars in Architecture Special Topics Two Hours (if hybrid) or Three Hours: 3 credits

This course is designed to examine, in greater depth, particular subject areas of the built environment, for example: integrated project delivery, advanced history and theory topics, site specific architecture and urban design, technical wall systems, advanced structural topics, sustainable design.

ARCH 771: Terminal Project Seminar

Two Hours: 3 Credits

This hybrid seminar will include discussions and research of trends in contemporary professional design. The primary intent of this effort is to further develop the student's research and writing skills, for preparation for a topical final design studio, or for a terminal design project. Prerequisite: ARCH 540 and ARCH 550 (or ARCH 550 as co-requisite).

ARCH 772: Architectural Design Studio VI

Twelve Hours: 6 Credits
Prerequisite: ARCH 550

This studio involves the conception, development and design of a comprehensive terminal design project programmed in ARCH 771, or, as an option, follows an advanced topical design project, collaboratively developed among students and faculty. Lectures, seminars and outside assignments as required.

CITY & REGIONAL PLANNING

CREP 501: Principles and Practices of City & Regional Planning

Three Hours: 3 Credits

This core course is designed to expose students to the principles, practices, and theory of City and Regional Planning. The course is an overview of planning theory and practice in the United States. The course integrates contemporary theory and practice from a historic perspective so that the students will learn why the planning profession evolved and how it has changed in the United States over the recent past. They are then expected to extend this knowledge to Baltimore and beyond. The course incorporates issues of ethics and diversity as they relate to planning theory, practice, and education.

CREP 502: Geographic Information Systems for Planners

Three Hours: 3 Credits

This course introduces Geographic Information Systems (GIS) and their applications. The first part of the course will be devoted to learning to think spatially. Students will engage in exercises that help in understanding how and why spatial analyses contribute to better management in urban planning. The second part of the course will introduce the concepts needed to effectively and correctly use GIS, and will develop basic proficiency in the use of GIS software

CREP 506: Urban Land Use for Planners

Three Hours: 3 Credits

This course surveys urban land use patterns, practices and planning strategies across North America and abroad. Through lectures, discussions, course readings and projects, the course investigates contemporary land planning and development practices in both urban and suburban locales and within metropolitan, national and global economic contexts. The emphasis is oriented toward processes rather than outcomes, attempting understand "how to plan" rather than what plans look like when they are complete. The course attempts to identify and understand the most influential constituencies and pervasive practices that shape contemporary urban development, while learning how to effectively insert ourselves within those processes and advocate for progressive change.

CREP 510: City & Regional Planning Studio I

Three Hours: 3 Credits

This core course introduces students to the realm of professional planning. Working with a client and multiple stakeholders, students create a plan that addresses a problem or opportunity in the city or metropolitan region. Students are exposed to all aspects of the planning process, including defining problems and opportunities, creating goals and objectives, designing and carrying out field study, gathering and analyzing data; soliciting, mediating among and weighing the interests of stakeholders; developing recommendations and implementation strategies and producing a final plan document and presentation.

CREP 512: Urban Economics for Planning

Three Hours: 3 Credits

This core course applies economic concepts to planning and policy making. It explores how capital, entrepreneurship, labor, technology, and policy shape the built environment. It starts with basic economic concepts and examines the justifications of planning as a tool to improve efficiency in land and housing market. It discusses housing consumption and neighborhood changes, suburban land speculation and sprawl, relationship between a city and its region, and urban and regional policy.

CREP 513: History of City & Regional Planning

Three Hours: 3 Credits

This core course presents an overview of the principal concepts that have guided the growth of cities and the development of the practice and profession of urban planning, from its earliest inceptions through the present day. The discussion of history will connect theory and practice – placing key actors, their plans and the subsequent plans they have inspired in the context of the intellectual development of the field. The course also attempts to develop an accurate picture of urban life during key moments in the history of the American city and determine how it has been impacted by various plans, movements and development initiatives. Finally, the course is a broader laboratory for exploring contemporary ideas concerning the planning, design, development and governance of American cities, while relating them to their historic antecedents.

CREP 514: Seminar in Urban Design I

Three Hours: 3 Credits

This course will explore how cities evolve, grow, shrink or change over time; examine strategies for understanding, interpreting and engaging city form; and identify forces that impact its shape and growth. The course considers urban design in its broadest sense, both as a practice that guides or directs the physical development of cities and as an interpretive tool for understanding urban life. Finally the course critiques contemporary theories of urban design and attempts to develop its own sets of principles that will enable the creation of a more sustainable, prosperous, equitable or joyful city.

CREP 515: Seminar in Urban Design II

Three Hours: 3 Credits

The course takes a comparative approach on understanding the contemporary and historic issues and theories of city and urban design. The course examines the socio political dimensions of city and urban design in the public as well as private sector projects in the US and aboard from colonial to modern times and see how they have influenced the quality of the built environment.

CREP 520: City & Regional Planning Studio II

Three Hours: 3 Credits

This core course builds upon the experience of City and Regional Planning Studio I, asking students to undertake a complex planning project working with a client and within a team format. Students will use the semester to complete a comprehensive plan for a neighborhood or area within the city or metropolitan region. Through this experience, students will continue to develop all of their planning skills, particularly those that involve field work, data collection and analyses; geographic information and mapping systems, strategic analyses, phasing and implementation strategies, graphical and oral presentation skills, facilitation of participatory planning processes and mediation among conflicting stakeholders.

CREP 521: Computer and Data Applications for Planners

Three Hours: 3 Credits

This core introductory course prepares students to understand data collection and data analysis. Student learn how to conduct survey, build dataset, use data to prepare Excel graphs such as population pyramids, and conduct spreadsheet analysis. Student also learn how to retrieve secondary data (such as demographic and economic data from the Census Bureau) to develop a profile of a neighborhood or a community.

CREP 522: Land Development Law

Three Hours: 3 Credits

This core course is designed to add specialized information to the student's general understanding of the land development process in the field of planning. The course provides students with an awareness of the legal aspects of planning and how the legal organization and system effects planning. Attention focuses on the major legal principles, which apply to public and private use of the physical environment, and especially the land development process. Students also become acquainted with the legal framework, legislative and administrative processes regarding public response, review, and input on development rules and regulations.

CREP 523: Quantitative Analysis and Methods for Planners

Three Hours: 3 Credits

This core intermediate level quantitative course covers methods commonly used in planning practice. It includes statistics, projection methods, housing analysis, cohort survival models, impacts analysis, economic analysis and financial modeling. The emphasis is how to integrate quantitative analysis results, graphics, and narratives to prepare a strong professional planning report. Completion of CREP 521

CREP 524: Public Facilities Planning

Three Hours: 3 Credits

This course will investigate the factors contributing to alternative locations for activities/facilities as determined by transportation, land use patterns, performance standards, etc. The economics, spatial context, and patterns of location of public facilities will be considered.

CREP 526: Urban Transportation Planning

Three Hours: 3 Credits

This course explores the various issues in urban transportation. The fundamentals of transportation technology are explored with a focus on urban mass transit, regional highway impacts and transit-oriented development (TOD). The transportation planning process is analyzed through the use of major transportation studies. Students will learn to demonstrate planning practice skills through data collection, problem analysis, plan foundation, evaluation, and implementation.

CREP 532: Municipal Finance and Budgeting

Three Hours: 3 Credits

This course examines government financial issues and various financing programs that support planning efforts. It discusses local public service provision and its funding, theories of taxation, the budgetary process of local government, fiscal impacts of development, tax base and school funding. Students will analyze fiscal distress and urban decline and examine the various programs to stimulate local development

CREP 533: Planning Administration and Management

Three Hours: 3 Credits

Theories of planning process are compared with concepts of organizational structures, functions, and processes. National, state, regional, city neighborhood, and corporate structures are examined.

CREP 534: Public Policy Analysis

Three Hours: 3 Credits

This course focuses on building the practitioners understanding of public policy, the issues and techniques of policy analysis, and its relationships to city and regional planning. The objective of course is to assist in building policy skills for job performance. Topics covered include: understanding the role of the policy analyst in informing legislative and investment decisions, the types of information and sources useful to good policy assessments; techniques of policy, program and project monitoring and evaluation; and understanding the complexity of objectives and actors in the policy formulation arena.

CREP 537: Program Development and Implementation

Three Hours: 3 Credits

This course focuses on urban program design and implementation, including grant application preparation, studies of marketing feasibility, needs assessment, project management and budget control. Students also learn ex post evaluation (monitoring) skills so as to assess program performance.

CREP 538: Neighborhood and Community Development

Three Hours: 3 Credits

This course will provide an overview of the field of urban planning and neighborhood and community development. It will introduce students to methods and tools used to study the urban experience and provide a comprehensive, yet basic understanding of the urban experience and its relationships to human society. This course will help students profit from the urban experience and become better participants in their civic and professional lives by encouraging them to wrestle with the most pressing urban issues of the 21st Century.

CREP 539: Housing and Land Development

Three Hours: 3 Credits

This course will expose students to the policy, economic and implementation issues of housing development. The first part of the course discusses the difference between housing need and housing demand; U.S. housing policy; structure of the US housing market; key issues of how housing development is financed; and barriers to affordable housing development. The second half of the course focuses on technical issues affecting decision-making and design in land development. While the major focus is on the U.S. housing market, where appropriate, international examples will be provided and students are encouraged to do their research on international topics.

CREP 542: Environmental Planning

Three Hours: 3 Credits

This course focuses on building the practitioners understanding of environmental issues and their impact on community development and the built environment, and planning strategies for sustainable development. Topics covered include: topography, soil structure and land-based hazards; brownfield redevelopment and site remediation; natural resource characteristics, local endowments and the reciprocal relationship they have with each other and with human settlement; environmental impacts of land use development and methods of assessment; practices of pollution mitigation and site remediation in neighborhood and community economic development; and compliance with city, state and

federal legislation and policy. Students have lecture, case analysis and research exposure to these topics as they affect Baltimore and its metropolitan region and the Chesapeake Bay and Watershed.

CREP 546: Environmental Evaluation Techniques for Land Planning

Three Hours: 3 Credits

This course exposes students to the use of various physical maps, aerial photographs, including a range of other geographic information systems to undertake land suitability analysis for land use planning.

CREP 550: Regional Scale Planning-Land Planning Studio

Six Hours: 6 Credits

This studio will deal with large-scale regional development in the Baltimore metropolitan region. The course will address the many facets of city and regional development including financial, social, and environmental concerns. Proposals of criteria for development, land use programming and physical built form will be dealt with on an area-wide basis.

CREP 552: Site Planning for Planners

Three Hours: 3 Credits

This course will address how the attributes of nature can be incorporated into the urban fabric through the design of open space. The concern for literal and figurative connections with nature, sustainable landscape design, and environmental health will be emphasized. These elements are studied in relation to land use patterns, site context and social and cultural issues.

CREP 553: Landscape Resources for Planners

Three Hours: 3 Credits

Basic principles governing ecosystems will be studied to understand the role of natural factors as determinants of land use. Planning devices for resource protection, conservation, management and development will be examined. The aim is to develop a responsibility with the student to protect our landscape resources, and to appreciate the influence physical features have on man-made environments.

CREP 560: City & Regional Planning: Land Planning Workshop

Six Hours: 6 Credits

This workshop will introduce students to land planning and community design. Projects undertaken will be those having impacts reaching far beyond site boundaries. The student will develop programming, planning and design for large or complex sites taking into account natural and cultural features, market and economic conditions, user needs, and public policy. Strategies for project implementation, phasing, and maintenance will be addressed.

CREP 714: BES Internship for Planners

Three Hours: 3 Credits

The course will provide academic credit for work experience, internship, or community involvement. Any one of the above can be used to obtain academic credit, provided it relates to the planning profession. The student should discuss the experience that he/she intends to get academic credit for, with the Department Chairperson prior to enrolling for the course. Students are required to meet regularly with the instructor and write a term paper to document the student's experience at work, in the internship, or community involvement.

CREP 792: Thesis Research and Professional Report Preparation

Three Hours: 3 Credits

This is a core course that prepares students to either write a thesis or a professional project, which are the alternate capstone courses for the Department. Students should enroll in this course in the semester prior to the one in which they intend to graduate.

CREP 794: Professional Project in City and Regional

Three Hours; 3 Credits

This core capstone course aims to give students the competencies to conduct a real life planning project, write an individual professional report, and make a professional presentation. Each student executes a detailed study of a planning project typical of planning practice.

CREP 788-789: Supervised Research for Planners

Three Hours: 3 Credits

These courses are designed to enable students to participate in research areas of their competence under the supervision of faculty. Students are required to submit research findings in a term paper and to submit a written research proposal at the beginning of the semester.

CREP 797: Thesis Guidance

Two Hours: 2 Credits

Thesis guidance provides students who have not completed their thesis or professional project in the assigned semester, a mechanism for continuing their work under faculty supervision. Prerequisite: Permission of the Department Chair.

CREP 799: Thesis Seminar in City & Regional Planning

Three Hours: 3 Credits

This is a core capstone course where the student applies selected planning concepts and methods to an important substantive area and conducts academic planning research under careful supervision.

ENVIRONMENTAL STUDIES

ENST 512: Graphics Workshop

Three Hours: 3 Credits

Graphics Workshop is an interdisciplinary course taken jointly by students within the School of Architecture and Planning. The purpose of this course is to develop students' skills and techniques in visual communications, thus allowing them to select and apply the most appropriate means of graphically presenting problems and/or solutions. Students are also exposed to techniques and skills that aid in perceiving the built environment in three dimensions—a necessary ingredient for design creativity. Prerequisites: None.

ENST 515: Socio-Spatial Patterns of Human Settlement

Three Hours: 3 Credits

The course will explore the policies on, and patterns and conditions of human settlements, from a cross-cultural perspective. Historical as well as the current situation in various Latin American, Asian, and African countries will be covered. While the major focus is international, where appropriate, domestic examples will be provided and students can to do their research on domestic topics. .

ENST 542: Advanced Communications (3-D Modeling)

Three Hours: 3 Credits

As a continuation of ENST 512 and ENST 770, this course introduces 3D geometric modeling and rendering as techniques to conceive, analyze, visualize, and simulate forms. The course provides both a theoretical introduction to 3D- geometric modeling and an opportunity to develop skills in application through intensive practical work. Through a series of short design projects, students will learn to model and explore design ideas using—whenever appropriate—a variety of CADD, modeling and rendering applications. Prerequisites: ENST 512, or permission of Department Chair.

ENST 573: Principles of Site Planning

Three Hours: 3 Credits

The course introduces architects and planners to the principles and practices of site planning. The course covers site analysis, layout of major site features (buildings, roads, parking areas, etc.), and the design of outdoor spaces for pedestrian use. Prerequisites: Permission of the instructor and the Department Chair.

ENST 601: Historic & Cultural Preservation

Three Hours: 3 Credits

This course introduces the principles and practices of historic and cultural preservation, across the spectrum of the three environmental design disciplines of architecture, landscape architecture, and planning, with a special emphasis on African American historic and cultural preservation activities and resources. Prerequisite: Permission of the instructor or Department Chair.

ENST 605: Historic and Cultural Preservation Studio

Eight Hours: 6 Credits

This course is a historic preservation studio, with a focus on applied concepts in the practice of historic and cultural preservation across the three environmental design disciplines, architecture, landscape architecture, planning. Studio projects are a laboratory for applied research in historic preservation, with a focus on cultural resources. Prerequisites: ENST 601 or permission of instructor or Department Chair.

ENST 714: Built Environment Internship I

Hours Vary: 3 Credits

This course is designed to accommodate students involved in various work-study relationships in different agencies and community organizations. Working under the supervision of an office professional, the course will document and evaluate the diverse experiences of the students within the framework of the practice or agency. The instructor will determine the number of contact hours for an Internship based on the scope of work to be performed by the student and the number of course hours the student is taking in a given semester. Prerequisites: Permission of the Department Chair.

ENST 715: Built Environment Internship II

Hours Vary: 3 Credits

ENST 716: Built Environment Internship III

Hours Vary: 3 Credits

ENST 717: Built Environment Internship IV

Hours Vary: 3 Credits

ENST 738, 740, 741, 742 and 743: Seminars in Built Environment Studies

Three Hours: 3 Credits

This course is designed to examine, in greater depth, particular subject areas of the built environment, for example theories of architecture, behavior and the built environment, ecology and design, theory and criticism, culture and design, urbanism, and representation techniques. Prerequisites: Permission of the Instructor and the respective Department Chair.

ENST 739: Design & Human Behavior

Three Hours: 3 Credits

This course is an introduction to a range of urban space development theories, space organizing concepts, public, private and semi-public/private characteristics of space layout related to human use and comfort. Cultural, social, and psychological factors will be considered through selected readings and urban site visits. Various theories and methods of documenting human movement in space, location and analysis of site furnishings, relationships of architecture to landscapes, and the environmental assessment of climate and other factors that impact human comfort in urban spaces. This course takes an interdisciplinary approach (architecture, landscape architecture, planning, psychology, engineering) to the study of human engagement with the physical environment of the city. Prerequisites: Graduate standing or permission of Department Chair.

ENST 770: Computer Aided Design I (Digital Graphics & Representation Workshop)

Three Hours: 3 Credits

This course is an introduction to Computer Aided Design (CAD), Imaging and Desktop Publishing applications. Students will learn how to use computers for drawing plans, sections, and elevations. Once two-dimensional drawings are completed, they will be imported into Imaging software applications for rendering and shadow casting. Other three-dimensional applications/tools will be studied as an interface to enhance standard CAD drawings. Prerequisites: None.

ENST 771: Computer Aided Design II (3-D Animation & Visualization)

Three Hours: 3 Credits

Students develop advanced digital skills that are commonly utilized in projects assigned in the Landscape Architecture Program. Prerequisites: ENST 770, or permission of the Instructor or Department Chair.

ENST 788-789: Supervised Research Three Hours: 3 Credits, each course

These courses are designed to enable students to participate in research areas of their competence under the supervision of faculty. Students are required to submit research findings verbally and to submit a written report to the graduate faculty. Prerequisites: The submission of a well organized, focused, operational research proposal and permission of the Department Chair.

LANDSCAPE ARCHITECTURE

Note: Students should check with the Graduate Landscape Architecture Department for a comprehensive list of courses prerequisites that specifically relate to landscape architecture courses.

LAAR 510: Landscape Architecture Design Studio I

Ten Hours: 6 Credits

This course is an introduction to the design vocabulary and spatial principles necessary to organize exterior landscape spaces. Students study art and sculpture as a basis to begin explorations into concept development, drawing materials and techniques, model building and collage. Studies in this studio remain abstract in nature to ensure that students grasp the importance of design composition, human scale, and space definition in landscape settings. Students design small urban spaces during the course to assess their knowledge of concepts learned in the course. Prerequisites: Admission to program or permission of the Department Chair.

LAAR 511: History I: of Landscape Architecture

Three Hours: 3 Credits

An interactive course of historic traditions in garden design and landscape architecture that covers cultural and aesthetic traditions from the Monastic Gardens to the American estate, parks and land planning works of Frederick Law Olmsted. Multiple texts and visual materials are utilized to study the spatial organization, local and regional landscape contextual relationships, and cultural traditions of landscapes studied. Emphasis is placed on the social, cultural, artistic, political and technological forces that influenced the design of built landscapes in different time periods and geographic locations. This lecture course requires students to write critical papers, deliver in-class special reports, and produce other analytical special projects that analyze the structure and historical importance of built landscapes. Prerequisites: Graduate standing or permission of the Instructor.

LAAR 513: Environmental Resources I

Three Hours: 3 Credits

This course introduces students to the basic tools and concepts necessary to analyze natural systems for land use suitability. The principles governing ecosystems within the urban context are also studied. Ecologically based tools such as soil types, site inventory/analysis, watershed analysis, plant zones and ecosystems, renewable and non-renewable resources, heat islands and micro and macro-environments, wildlife corridors, and other natural and manmade systems are explored. Contemporary concepts related to 'green systems and products' are also explored relative to an understanding of how designers craft sustainable landscapes. The aim of this lecture course is to build a kit of landscape tools that construct a sense of land and environmental stewardship in the practice of landscape architecture.. Prerequisites: Graduate standing or permission of the instructor.

LAAR 520: Landscape Architecture Design Studio II

Ten Hours: 6 Credits

This design studio builds upon the abstract art related design elements and principles covered in LAAR 510. Emphasis is placed on the introduction of small scale urban projects that incorporate urban sites and their context. In particular, design projects are crafted to assist students in learning how to link design concepts with functional site programs. The course also reinforces the graphic techniques and graphic conventions typically used in the landscape architecture profession, the use of plan, section, elevation and 3-dimensional drawings to communicate ideas and spatial organization, and the craft and

use of model building to convey design intent, spatial organization, and human scale in space. Prerequisites: LAAR 510, ENST 512 or permission of Department Chair.

LAAR 522: Technology I: Grading & Drainage

Three Hours: 3 Credits

This course incorporates the study of techniques and methods commonly utilized by the profession to mold and shape the earth's surface in an ecologically and technically aesthetic manner. Course materials focus on the technical tools necessary to transform spatial design ideas into physical reality. Specific topics include concepts of land contours and slope analysis, the mathematical formulas and graphic conventions typically utilized for the grading of land surfaces, the balance of cut and fill when molding the land surface, and the calculations for storm water runoff to meet established city and other codes. The course instructor utilizes land model building exercises, lectures and film, multiple textbooks, and weekly problem-solving exercises to assess the information learned in the class. The course material reviews the grading of urban housing, streets and roads, parking lots, sidewalks/curb cuts, steps/ramps, ponds, and other elements of the urban landscape. Prerequisites: LAAR 510 and ENST 512, or permission of the Department Chair.

LAAR 523: Plant Materials Three Hours: 3 Credits

The study of plant materials is an introduction to woody plant materials (trees, shrubs, groundcovers) in terms of their botanical identification, common name, design characteristics, urban use and special uses in the urban realm. The course is a field-oriented course that requires visiting multiple sites to review plants in different urban growing conditions. The range of sites visited includes large residences, small/large public parks, natural preserves, and arboreta. In addition, the physical structure of plant root systems, growing form/habit, leaf structure, bark conditions, flowers and other identification characteristics are studied. Students are tested weekly through field plant identification tests on plants collected and studied the previous week. Prerequisites: Graduate standing or permission of Instructor.

LAAR 525: GIS: Geographic Information Systems for Landscape Architects Three Hours: 3 Credits

This computer software application introduces students to the use of a program that provides access to information layers important to the inventory and analysis of the urban environment. Students learn how to access data files (topography, land zoning, architecture, etc.) The course is less about the statistical analysis of GIS data and more concerned with the layering of different inventory files to formulate an analysis of specific landscape project sites and their context. Tools include: spatial modeling, visual analysis, resource management, site design, and the creation of visual data maps that convey the inventory and analysis process common to the practice of landscape architecture. Prerequisites: Graduate standing or permission of Instructor

LAAR 530: Landscape Architecture Design Studio III

Ten Hours: 6 Credits

This course addresses more complex creative conceptual ideas that are based on the intrinsic nature of sites, the interface between architectural structure and landscape features, the use of increased functional programs for site organization and human habitation, the layering of information from various sources to analyze sites and produce drawings, and the integration of natural and manmade systems within the urban environment. Projects in this design studio begin to introduce the student to real-world projects within urban communities in the Baltimore area and region. The interplay of natural systems, architectural massing, urban infrastructure, and socio-political conditions test the students

growing knowledge of design process with sites of increased scale. The student assessment is also based on an overlay of past courses relative to grading and drainage, three-dimensional computer and other graphic skills. Prerequisites LAAR 520 + 15 credits within Program, or permission of Department Chair.

LAAR 532: Technology II: Materials & Methods

Three Hours: 3 Credits

The content of this course includes the study of plants from a morphologic and physiologic adaptability standpoint. The soil structure, nutrient chemistry and contaminant loading conditions within the city are explored relative to. Prerequisites: LAAR 520 and LAAR 522, or permission of Department Chair.

LAAR 533: Environmental Resources II

Three Hours: 3 Credits

The content of this course includes the study of plants from a morphologic and physiologic adaptability standpoint. The soil structure, nutrient chemistry and contaminant loading conditions within the city are explored relative to the best practices for introducing and sustaining plants in harsh urban environments. The course also builds upon the tools learned in Environmental Resources I and uses case studies to test these tools in varying urban conditions. Students study ecological needs and planting practices as well as the design benefits of plants in the urban environment. The class looks at typical urban street conditions, urban wetlands, brown-fields and city parks as areas with unique plant requirements. Baltimore offers great opportunities to also study environmental systems that bisect the city such as Herring Run watershed. The assessment of knowledge learned in this class is based on written papers, test, and special projects. Prerequisites: LAAR 513, LAAR 520, LAAR 523 or permission of the Instructor or Department Chair.

LAAR 540: Landscape Architecture Design Studio IV

Ten Hours: 6 Credits

This design studio, in conjunction with LAAR 541, continues the educational objective of introducing increasingly complex site, conceptual, technical, and landscape scale in the study of landscape architecture place making. The projects are focused on community design and the physical manipulation of environments to revitalize and enhance human engagement and living in urban neighborhoods. Typical issues of concern that impact on physical design solutions include community identity and open space in urban neighborhoods Studio projects are drawn from real Baltimore neighborhoods where possible to provide students with realistic clients and client needs. The learning assessment in the course is built upon the students' application of current and previous course materials. Students will be expected to develop design packages that include inventory/analysis, conceptual sketches, site plans/sections/elevations/3-dimensional drawings, grading and drainage, and other components typically utilized by landscape architects to convey project information.

LAAR 541: Technology III: Advanced Site Construction

Three Hours: 3 Credits

This course, in conjunction with LAAR 540, teaches students the skills and information necessary to ensure that creative landscape architecture designs can be effectively constructed and sustained over time. The dominant information covered is a cross-section of typical construction materials utilized in the profession and technical drawings traditionally used to convey construction methods. Specific topics include: concrete, brick, wood and other construction materials, layout of design elements on sites, drawing conventions for construction drawings, stresses and construction material strengths, cost estimation, and other information needed to develop a package of construction drawings utilized by

contractors to effectively build landscape architecture projects. The learning assessment in this course is based on the students' ability to successfully take a series of small design projects and build a complete construction document package utilizing conventional landscape architecture vocabulary. The course also introduces students to the latest technologies and building systems that ensure green and sustainable landscape environments. Prerequisites: LAAR 522, LAAR 530 and LAAR 532, ENST 770 or permission of Department Chair.

LAAR 550: Landscape Architecture Design Studio V

Ten Hours: 6 Credits

This design studio addresses issues related to the planning and design of the urban landscapes at a citywide and regional scale. Studies focus on advancing skills in land development, site programming and master planning, and site design of urban landscape projects that have a strong interface with architecture and urban infrastructure. Emphasis is in this course is placed on the interdisciplinary nature of landscape architecture in the urban realm. Studio projects enhance the students' knowledge of architecture, planning, engineering and the work of other allied professions through the study of site, municipal/city guidelines and zoning, new architecture construction, preservation efforts, roadway and environmental infrastructure systems, transit and other urban systems. When it is possible, this interdisciplinary urban study is accomplished through a real-world project that includes multiple disciplines and public or non-profit agencies. The assessment of student learning is based on the students' effectiveness in organizing a complex array of information into creative design solutions based on their advanced standing and successful study in previous design, technology, natural resources and other program courses. The socioeconomic and cultural aspects of design and planning are also addressed within this course. Prerequisites: LAAR 540 and LAAR 541, or permission of Department Chair.

LAAR 551: History II: 20th Century History and Theory of Landscape Design

Three Hours: 3 Credits

This course is an historical investigation of the development of landscape architecture and urban design in the twentieth century. Emphasis is placed on the rise of modernism in architecture and landscape architecture, the ecological critique of modernism, emerging theories of landscape design, and twentieth century urban design and theory. Prerequisites: Graduate standing or permission of Instructor.

LAAR 552: Planting Design Three Hours: 3 Credits

The planting design course utilizes plants to enhance the design and aesthetic enjoyment of landscapes. The course presents a variety of urban project types to explore the full range of plants in the design of places that improve human comfort and safety in private and public urban spaces. Students utilize their prior design studio learning as well as technology knowledge to develop creative concepts for the use of plants in landscape architecture projects. The assessment of student learning in this course is based not only on the students' knowledge of plants from LAAR 523-Plant Materials, but also based on their ability to effectively convey planting design information utilizing the drawing and technical conventions of the profession. This course also teaches the application of technical plant lists (sizing, specifications), cost estimates, and planting information specific to each plant. Prerequisites: LAAR 523, LAAR 520 or permission of Department Chair.

LAAR 560: Studio VI: Master's Degree Project

Six Hours: 6 Credits

This is a terminal master's level design or planning project that tests the students' base of professional knowledge in landscape architecture. Students initiate a design project based on the development of a

specific question or proposition developed in the previous semesters Research Methods course. The project is further structured based on a Research Journal developed in LAAR 751-Research Methods and approved by an established Thesis Committee. The assessment of student work in this course is based on the students' consistent alignment with a clearly articulated research question, the quality of the work given prior course work, and the contribution the project to new knowledge within the profession of landscape architecture. Prerequisites: Approved Written Proposal, LAAR 550, and LAAR 751, or permission of Department Chair.

LAAR 561: Landscape Architectural Practice

Three Hours: 3 Credits

Students examine the role of the landscape architect in a variety of work environments such as private practice, government sector, education and related industries. Study includes the legal, ethical, and contractual responsibilities of landscape architectural practice and basic procedures, management and information systems used in professional offices. Prerequisites: Prerequisites: Must be in the final year of the MLA program and LAAR 550, or permission of Department Chair.

LAAR 751: Research Methods

Three Hours: 3 Credits

This course provides an overview of research methods commonly used in landscape architecture. The focus in the course is on the development of each student's individual scholarship, written thesis or the master's project as terminal degree projects. Emphasis is placed on the articulation of a research "question" and the development of that question into an appropriate project type, methodology, supportive thesis committee, and scope of work and time frame for completing the project work. Prerequisites: Must be in final year of the MLA program, Written Proposal, and LAAR 540 or permission of Department Chair.

LAAR 788-789: Supervised Research

Three Hours: 3 Credits

These courses are designed to enable students to participate in research areas of their competence under the supervision of faculty. Students are required to submit research findings verbally and to submit a written report and other approved materials to the graduate faculty advisor. The Supervised Research project must adhere to the established Guidelines established by the department. Prerequisites: The submission of a well organized, focused, operational research proposal and permission of the Department Chair or designated faculty advisor.

LAAR 797: Thesis Guidance

Two Hours: 2 Credits

Thesis guidance (for students who have first completed LAAR 799 only) provides students, who have not completed their thesis in the assigned semester a mechanism for continuing their work under faculty supervision. Prerequisites: LAAR 799 and permission of the Thesis Advisor and Department Chair.

LAAR 799: Thesis Seminar Three Hours: 3 Credits

Students are expected to demonstrate leading professional knowledge through rigorous thesis research. A research-based thesis is for students having an interest in a topic relevant to landscape architecture history/culture, theory, design, construction, or practice; the presentation format is a written text with supporting graphics as appropriate. The thesis option must meet all of the requirements for completing

a thesis as outlined in the School of Graduate Studies Dissertation/Theses Handbook. Prerequisites: LAAR 540 and LAAR 751, or permission of Department Chair.