Landscape Architecture

Degree Offered

- Bachelor of Science in Landscape Architecture

Nature of the Program

Landscape architecture is the art of design, planning, and arranging natural and man-made elements on the land. It applies cultural and scientific knowledge with concern for the conservation and stewardship of natural and aesthetic amenities to create an environment that serves a useful and enjoyable purpose. This involves consideration of the quality of life in urban and natural settings, as well as the interaction of humans with nature. The landscape architecture program at West Virginia University strives to equip students with techniques and skills through problem-solving in design theory, site construction, land use planning, and planting design. It emphasizes a philosophy of responsibility and commitment to ethical standards regarding the natural environment, personal relationships, and professional practice.

The faculty represents a multi-disciplinary team with practical experience in creative and scientific research, design, consultation, and public service. This diversity is the nucleus of the program, allowing for a strong undergraduate curriculum supplemented by related courses in the arts, sciences, engineering, and planning, reflecting the needs of the Appalachian region and current trends within the profession.

Graduates of the program can assume traditional landscape architectural roles, e.g., positions with design consulting firms, governmental planning departments, construction firms, transportation planning agencies, etc. In addition, WVU graduates are prepared for design and planning positions meeting the needs common to West Virginia and other rural areas.

The landscape architecture program is fully accredited by the Landscape Architecture Accreditation Board of the American Society of Landscape Architects. To graduate students must complete a minimum of 120 total credits. Students will typically complete more than the 120 total credit minimum.

Click here to view the Suggested Plan of Study (p. 2)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

<table>
<thead>
<tr>
<th>F1 - Composition &amp; Rhetoric</th>
<th>3-6</th>
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</thead>
<tbody>
<tr>
<td>ENGL 101 &amp; ENGL 102 or ENGL 103</td>
<td>Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing</td>
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<tr>
<td>F2A/F2B - Science &amp; Technology</td>
<td>4-6</td>
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<tr>
<td>F3 - Math &amp; Quantitative Reasoning</td>
<td>3-4</td>
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<tr>
<td>F4 - Society &amp; Connections</td>
<td>3</td>
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<tr>
<td>F5 - Human Inquiry &amp; the Past</td>
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<tr>
<td>F6 - The Arts &amp; Creativity</td>
<td>3</td>
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<tr>
<td>F7 - Global Studies &amp; Diversity</td>
<td>3</td>
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<tr>
<td>F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)</td>
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</table>

Total Hours

31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

CURRICULUM REQUIREMENTS

In addition to the following curriculum requirements, students will be required to work at least one summer in an approved landscape architecture office or equivalent. Student will be required to earn a grade of C- or better in all of their Landscape Architecture/Horticulture Courses.

Timely completion of required MATH courses are critical for advancement in this program of study.
GEF Requirements (4, 5, 7, and 8) 15

ENGL 101 Introduction to Composition and Rhetoric 6
& ENGL 102 and Composition, Rhetoric, and Research (GEF 1)

Select one of the following (GEF 2): 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>PLSC 206</td>
<td>Principles of Plant Science</td>
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<tr>
<td>BIOL 101</td>
<td>General Biology</td>
</tr>
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</table>
& BIOL 103 | and General Biology Laboratory      |
| BIOL 105 | Environmental Biology                |
& BIOL 106 | and Environmental Biology Laboratory|

Select one of the following or higher (GEF 3): 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>MATH 124</td>
<td>Algebra with Applications</td>
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<tr>
<td>MATH 126</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH 129</td>
<td>Pre-Calculus Mathematics</td>
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<tr>
<td>MATH 150</td>
<td>Applied Calculus</td>
</tr>
<tr>
<td>MATH 128</td>
<td>Plane Trigonometry (GEF 8)</td>
</tr>
<tr>
<td>LARC 212</td>
<td>History of Landscape Architecture (GEF 6)</td>
</tr>
</tbody>
</table>

University Requirements

ANRD 191 First-Year Seminar 1

Capstone Course

LARC 451 Advanced Landscape Architectural Design 2 5

Major Requirements

LARC 105 Introduction to Landscape Architecture, Environmental Design and Planning 3
LARC 120 Landscape Architectural Drawing 3
LARC 121 Landscape Architectural Graphics 3
LARC 223 Computer Graphics in Landscape Architecture 3
LARC 231 Landscape Construction Materials and Methods 3
LARC 250 Theory of Landscape Architectural Design 3
LARC 251 Landscape Architectural Design 3
LARC 261 Planting Design 3
LARC 330 Landscape Architectural Construction 1 4
LARC 331 Advanced Grading & Stormwater 4
LARC 350 Landscape Architectural Design 2 4
LARC 351 Landscape Architectural Design 3 4
LARC 360 Natural Systems Design 4
LARC 450 Advanced Landscape Architectural Design 1 5
LARC 452 Contemporary Issues in Landscape Architecture 2
LARC 484 Professional Practice 3
HORT 260 Woody Plant Materials 3
RESM 440 Foundations of Applied Geographic Information Systems 3

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>LARC 465</td>
<td>Regional Design</td>
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<tr>
<td>LARC 466</td>
<td>Introduction to Urban Design Issues</td>
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Studio Art Courses (Art 111 and Art 112 or as advised) 6

Electives 11

Total Hours 120

SUGGESTED PLAN OF STUDY

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>LARC 105</td>
<td>3 ENGL 101 (GEF 1)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 120</td>
<td>3 MATH 128 (GEF 8)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 223</td>
<td>3 LARC 121</td>
<td>3</td>
</tr>
</tbody>
</table>
ANRD 191 1 Studio Art Course 3
Select one of the following (GEF 2):
  BIOL 101
  & BIOL 103
  BIOL 105
  & BIOL 106
  PLSC 206
Select one of the following or higher (GEF 3):
  MATH 124
  MATH 126
  MATH 129
  MATH 150

Second Year

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<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tr>
<td></td>
<td>ENGL 102 (GEF 1)</td>
<td>3</td>
<td>LARC 212 (GEF 6)</td>
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<tr>
<td></td>
<td>HORT 260</td>
<td>3</td>
<td>LARC 231</td>
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<td></td>
<td>LARC 250</td>
<td>3</td>
<td>LARC 251</td>
<td>3</td>
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<td>Studio Art Course</td>
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<td>LARC 261</td>
<td>3</td>
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<tr>
<td></td>
<td>GEF 4, 5, 7, or 8</td>
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<td>RESM 440</td>
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Total: 17 15

Third Year

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<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tr>
<td></td>
<td>LARC 330</td>
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<td>LARC 331</td>
<td>4</td>
<td>Summer Professional Experience</td>
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<td>LARC 350</td>
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<td>LARC 351</td>
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<td></td>
<td>LARC 360</td>
<td>4</td>
<td>LARC 465 or 466</td>
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<td></td>
<td>GEF 4, 5, 7, or 8</td>
<td>3</td>
<td>LARC 484</td>
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<td>GEF 4, 5, 7, or 8</td>
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Total: 15 15 0

Fourth Year

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<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tr>
<td></td>
<td>LARC 450</td>
<td>5</td>
<td>LARC 451</td>
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<td></td>
<td>LARC 452</td>
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<td>Elective</td>
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<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>GEF 4, 5, 7, or 8</td>
<td>3</td>
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</table>

Total: 13 13

Total credit hours: 120

Major Learning Outcomes

LANDSCAPE ARCHITECTURE

Graduates of the Program will complete coursework and an internship(s) providing the knowledge and skills in environmental design problem solving, design theory, site construction, land use planning, community development, and ecological design to enter into and thrive in the profession of Landscape Architecture.

Graduates of the program are prepared to assume traditional landscape architectural roles, e.g., positions with design consulting firms, governmental design and planning departments, construction firms, transportation planning agencies, etc. To accomplish this goal graduates will:

1. Demonstrate a working knowledge of the core skills and techniques of landscape architecture including; graphic communication – both hand graphics and computer based, environmental analysis, design development methods and processes, and site engineering and design implementation.
2. Demonstrate knowledge in allied fields such as plant ecology, community design, environmental restoration, and urban design that are critical adjucnts to the practice of landscape architecture.

3. Develop and present project results through graphic, written, and oral presentations.

4. Have the problem solving / critical thinking skills necessary for focused professional development, as well as for broader social development and lifelong learning and community participation and engagement.

LARC 105. Introduction to Landscape Architecture, Environmental Design and Planning. 3 Hours.
A general overview of the field of landscape architecture, environmental design and planning. The course reviews the practices of design and planning professionals and their connections to society. An emphasis is placed on past development traditions and current sustainable development methods, strategies, and impacts of planning and design through the review of past and current projects.

LARC 120. Landscape Architectural Drawing. 3 Hours.
PR: For landscape architecture majors only. Introduction to elements of visual techniques in drafting, basic design, and environmental systems. (Two 3-hr. studios.).

LARC 121. Landscape Architectural Graphics. 3 Hours.
Introduction to design and graphic methodology with applications to current standards. Development of principles of communication in two- and three-dimensional visual thinking applicable to environmental design professions. (Two 3-hr. studios.).

LARC 191. First-Year Seminar. 1-3 Hours.
Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

LARC 212. History of Landscape Architecture. 3 Hours.
A broad survey of the history of the designed human environment with emphasis on the development of landscape architecture. (Does not fulfill Cluster A for landscape architecture students.).

LARC 223. Computer Graphics in Landscape Architecture. 3 Hours.
PR: LARC 121. Application of basic computer graphics to include drafting, rendering, and visualization software used in developing landscape architectural plans and environment analysis. (Two 3-hr. studios.).

LARC 224. Digital Design Graphics for Landscape Architecture. 2 Hours.
This course is designed to provide students with a working knowledge of how to generate and manipulate graphic images digitally. Over the course of the semester, we will cover the basics of the three most common Adobe Creative Cloud programs used by landscape architects: Photoshop, Illustrator, InDesign and Acrobat.

LARC 229. Landscape Architecture. 3 Hours.
PR: For non-landscape architecture majors only. An appreciation of the basic principles of planting design and information pertaining to the use of ornamental plants around the home. (2 hr. lec., one 2-hr. studio.).

LARC 231. Landscape Construction Materials and Methods. 3 Hours.
PR: LARC 250. A study of materials used in landscape architectural construction with emphasis on methods of construction and the preparation of construction drawings for design implementation. (2 hr. lec., one 2-hr. studio.).

LARC 250. Theory of Landscape Architectural Design. 3 Hours.
PR: LARC 121 or equiv. Application of elements and principles of art and design to landscape architecture. (1 hr. lec., two 2-hr. studios.).

LARC 251. Landscape Architectural Design. 3 Hours.
PR: LARC 250 or equiv. Investigation and application of various factors which play a role in the design of natural and man-made environment. (1 hr. lec., two 2-hr. studios.).

LARC 260. Ornamental Woody Plants and Groundcovers. 3 Hours.
PR: BIOL 101 and BIOL 103 or equiv. Design uses, ornamental qualities, cultural requirements and identification of woody plants and groundcovers in West Virginia. Field course. (One day field trip required at student’s expense). (Two 3-hr. studios.).

LARC 261. Planting Design. 3 Hours.
PR: LARC 250 and LARC 260. Study of planting design theory and practice, including uses of plants in site and environmental design, planting design techniques and preparation of planting plans, construction details, and technical specifications. (1 hr. lec., two 2-hr. studios.).

LARC 271. Portfolio Design. 1 Hour.
PR: LARC 121 and LARC 250 and LARC 260. Introduction to graphic design and presentation formals and their application for the preparation of the second year portfolio. (One 2-hr. studio.).

LARC 293. Special Topics. 1-6 Hours.
PR: Consent. Investigation of topics not covered in regularly scheduled courses.

LARC 330. Landscape Architectural Construction 1. 4 Hours.
PR: (CE 200 or equiv.) and (MATH 126 or MATH 126A or MATH 126B or MATH 126C) and (MATH 128 or MATH 129 or equiv.) The study of the technical principles of grading design, their application to site planning, and preparation of land form grading plans. (1 hr. lec., two 3-hr. studios.).
LARC 331. Landscape Architectural Construction 2. 4 Hours.
PR: LARC 330. Study and preparation of parkway plans (road alignment), surface and sub-surface drainage plans, advanced grading plans, and cost estimates. (2 hr. lec., two 2-hr. studios.).

LARC 350. Landscape Architectural Design 2. 4 Hours.
PR: LARC 223 and LARC 251 and LARC 261. Study of medium scale site design with emphasis on site analysis, design methodology and presentation. (1 hr. lec., two 3-hr. studios.).

LARC 351. Landscape Architectural Design 3. 4 Hours.
PR: LARC 330 and LARC 350 and LARC 360. Site-design problems dealing with complex environmental systems emphasizing rural and urban design. Projects are integrated with landscape architectural construction. (1 hr. lec., two 3-hr. studios.).

LARC 360. Natural Systems Design. 4 Hours.
PR: LARC 251 and LARC 261 and PR or Conc: LARC 350. Study of native and naturalized plants of this region and their ecological tolerances, importance to site analysis, and use in planting design. (1 hr. lec., two 3 hr. studios.) (2-day field trip required at student's expense.).

LARC 361. Interior Plantscaping. 2 Hours.
PR: BIOL 101 and BIOL 103 or PLSC 206. The study of plants appropriate to interior plantscaping and their special needs and uses in design situations. (One day field trip required at student's expense.) (1 hr. lec., one 3 hr. studio.).

LARC 423. Advanced CAD. 2 Hours.
PR: LARC 223 or equivalent. Study and application of advanced computer techniques including Land Development Desktop and AutoCAD. (Two 2 hr. studios.).

LARC 444. Western European Gardens, Landscapes and Architecture: Field Study. 6 Hours.
This is a travel course that includes visits to Belgium, France, Netherlands and Germany and focuses on a variety of environments- urban, agricultural/rural, and natural. Major cities in the travel experience may include Brussels, Paris, and Amsterdam. The core work of the course consists of a journal/sketchbook. (Also listed as PLSC 444.).

LARC 448. Design Analysis. 2 Hours.
PR: Consent. Analysis of planning and design projects to offer solutions to a given problem.

LARC 450. Advanced Landscape Architectural Design 1. 5 Hours.
PR: LARC 331 and LARC 351 and LARC 360. Comprehensive design problems integrating all aspects of site design, planting design and construction. Includes advanced projects for urban and rural sites. (2 hr. lec.; two 3 hr. studios.).

LARC 451. Advanced Landscape Architectural Design 2. 5 Hours.
PR: LARC 450. A comprehensive problem in landscape architecture in which the student demonstrates proficiency acquired from their program of study. (2 hr. lec., two 3 hr. studios.).

LARC 452. Contemporary Issues in Landscape Architecture. 2 Hours.
PR: LARC 250 and PR or CONC: LARC 251. A series of seminar discussions exploring current and future trends in the practice of landscape architectural design, planning, and management. (2 hr. lec.).

LARC 465. Regional Design. 3 Hours.
PR: Consent. Consideration of regional landscapes in order to effectively relate design to the ecology and development of a region.

LARC 466. Introduction to Urban Design Issues. 3 Hours.
PR: Consent. Community analysis methods, city and small town planning and management of community growth. The course focus is on understanding community and urban design issues and growth management. (Offered in fall of odd years.).

LARC 484. Professional Practice. 3 Hours.
PR: Consent. Procedures in preparation of contract documents, fees, estimates, operation of an office, and relationship to clients and contractors. (3 hr. lec.).

LARC 490. Teaching Practicum. 1-3 Hours.
PR: Consent. Teaching practice as a tutor or assistant.

LARC 491. Professional Field Experience. 1-18 Hours.
PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

LARC 493. Special Topics. 1-6 Hours.
PR: Consent. Investigation of topics not covered in regularly scheduled courses.

LARC 494. Seminar. 1-3 Hours.
PR: Consent. Presentation and discussion of mutual concern to students and faculty.

LARC 495. Independent Study. 1-6 Hours.
Faculty supervised study of topics not available through regular course offerings.

LARC 496. Senior Thesis. 1-3 Hours.
PR: Consent.
LARC 498. Honors. 1-3 Hours.
PR: Students in Honors Program and consent by the honors director. Independent reading, study or research.