# Environmental and Community Planning

## Degree Offered
- Bachelor of Science in Landscape Architecture

## Nature of the Program
Environmental and Community Planning provides you with the knowledge, skills and abilities to help shape your community, region, the state and the world. You'll also gain a deeper understanding of the natural environment, the built environment and human engagement with the environment.

Upon graduation, you'll have expertise in both the analysis and the synthesis of the physical, social, political and economic issues that shape development. The curriculum emphasizes project-based and place-based learning in an interdisciplinary environment. Participation with communities and individuals in envisioning their future is a key component of the planning process. This approach allows you to see how different environments and situations exist, operate and interact in real-life settings. You'll learn to make informed decisions related to alternative futures in community and environmental development and management.

## CURRICULUM REQUIREMENTS

Minimum grade of C- is required in all coursework

### ANRD 191 First-Year Seminar 1

### GEF Requirements 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Introduction to Composition and Rhetoric</td>
<td>6</td>
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<tr>
<td>&amp; ENGL 102</td>
<td>and Composition, Rhetoric, and Research (GEF 1)</td>
<td></td>
</tr>
<tr>
<td>or ENGL 103</td>
<td>Accelerated Academic Writing</td>
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Select one of the following (GEF 2): 4

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>Environmental Biology</td>
<td>3</td>
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<tr>
<td>&amp; BIOL 106</td>
<td>and Environmental Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>GEOG 150</td>
<td>Digital Earth</td>
<td>3</td>
</tr>
<tr>
<td>&amp; GEOG 149</td>
<td>and Digital Earth Lab</td>
<td></td>
</tr>
<tr>
<td>STAT 111</td>
<td>Understanding Statistics (GEF 3)</td>
<td>3</td>
</tr>
<tr>
<td>DSGN 280</td>
<td>Sustainable Design and Development (GEF 4)</td>
<td>3</td>
</tr>
<tr>
<td>COMM 104</td>
<td>Public Communication (GEF 5)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 212</td>
<td>History of Landscape Architecture (GEF 6)</td>
<td>3</td>
</tr>
<tr>
<td>DSGN 140</td>
<td>Sustainable Living (GEF 7)</td>
<td>3</td>
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### Landscape Architecture Coursework

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>LARC 105</td>
<td>Introduction to Landscape Architecture, Environmental Design and Planning</td>
<td>3</td>
</tr>
<tr>
<td>LARC 120</td>
<td>Landscape Architectural Drawing</td>
<td>3</td>
</tr>
<tr>
<td>LARC 271</td>
<td>Portfolio Design</td>
<td>1</td>
</tr>
<tr>
<td>LARC 350</td>
<td>Landscape Architectural Design 2</td>
<td>4</td>
</tr>
<tr>
<td>LARC 351</td>
<td>Landscape Architectural Design 3</td>
<td>4</td>
</tr>
<tr>
<td>LARC 448</td>
<td>Design Analysis</td>
<td>2</td>
</tr>
<tr>
<td>LARC 450</td>
<td>Advanced Landscape Architectural Design 1 (fulfills Writing and Communication Skills requirement)</td>
<td>5</td>
</tr>
<tr>
<td>LARC 451</td>
<td>Advanced Landscape Architectural Design 2</td>
<td>5</td>
</tr>
<tr>
<td>LARC 465</td>
<td>Regional Design</td>
<td>3</td>
</tr>
<tr>
<td>or LARC 466</td>
<td>Introduction to Urban Design Issues</td>
<td></td>
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<tr>
<td>LARC 484</td>
<td>Professional Practice</td>
<td>3</td>
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### Additional Required Coursework

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AGEE 220</td>
<td>Group Organization and Leadership (GEF 8)</td>
<td>3</td>
</tr>
<tr>
<td>DSM 410</td>
<td>The Global Context for Design</td>
<td>3</td>
</tr>
<tr>
<td>RESM 440</td>
<td>Foundations of Applied Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>RESM 441</td>
<td>Introduction Geographic Information Systems Natural Science</td>
<td>2</td>
</tr>
<tr>
<td>or RESM 442</td>
<td>Introduction Geographic Information Systems Social Science</td>
<td></td>
</tr>
<tr>
<td>RESM 450</td>
<td>Land Use Planning Law</td>
<td>3</td>
</tr>
<tr>
<td>RESM 455</td>
<td>Practice of Land Use Planning</td>
<td>3</td>
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General Electives 38
Total Hours 120

SUGGESTED PLAN OF STUDY

First Year

Fall | Hours | Spring | Hours
--- | --- | --- | ---
ENGL 101 (GEF 1) | 3 | LARC 212 (GEF 6) | 3
LARC 105 | 3 | LARC 271 | 1
LARC 120 | 3 | COMM 104 (GEF 5) | 3
DSGN 140 (GEF 7) | 3 | STAT 111 (GEF 3) | 3
ANRD 191 | 1 | Elective | 4
Elective | 3 | 

16 | 14

Second Year

Fall | Hours | Spring | Hours
--- | --- | --- | ---
ENGL 102 (GEF 1) | 3 | RESM 440  & RESM 441 | 5
DSGN 280 (GEF 4) | 3 | AGEE 220 (GEF 8) | 3
Select one of the following (GEF 2): | 4 | GEF 8 | 3
  BIOL 105 & BIOL 106  GEOG 150 & GEOG 149 | Elective | 4
GEF 8 | 3 | 
Elective | 2 | 

15 | 15

Third Year

Fall | Hours | Spring | Hours
--- | --- | --- | ---
RESM 455 | 3 | LARC 351 | 4
LARC 350 | 4 | LARC 448 | 2
Elective | 8 | LARC 484 | 3
  | Elective | 6 | 

15 | 15

Fourth Year

Fall | Hours | Spring | Hours
--- | --- | --- | ---
LARC 450 | 5 | DSM 410 | 3
LARC 466 or 465 | 3 | LARC 451 | 5
Elective | 7 | RESM 450 | 3
  | Elective | 4 | 

15 | 15

Total credit hours: 120

Major Learning Outcomes

ENVIRONMENTAL AND COMMUNITY PLANNING

• To provide students with a base of knowledge, skills, and abilities to be ready for professional positions or graduate education in planning.
• To provide students an understanding of planning theory and principles.
• To develop students’ skills to undertake and interpret research on planning and related topics.
• To develop students’ ability to apply knowledge of planning to issues related to development.
• To develop students’ ability to solve real-world problems in varied situations and/or for varied constituencies.
• To develop students’ skills in communicating planning issues effectively to community residents, in oral, graphic and written form.
• To prepare students to be future professionals in the field of planning.
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. Study of graphic design and presentation formal's 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.