LARC 1330. Designed Ecologies of the City. 4 Hours.
Introduces the emerging field of urban ecology and ecologically inspired urbanism. Offers students an opportunity to develop contemporary insights about resilient urban form and speculative frameworks, ecological patterns and processes, urban ecosystems, and methods of urban habitat analysis. Covers urban hydrology, geomorphology, and soils; urban regions and ecoregions; urban effects on climate; ecosystem services; landscape ecology and infrastructural adaptation; postindustrial landscapes; and the theory of landscape and ecological urbanism. Other lecture topics address urban waterfront resilience, sea-level rise, waste, contamination, remediation, and ecological disturbance and succession.
LARC 1990. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

LARC 2130. Sustainable Urban Site Design. 6 Hours.
Focuses on site planning and design with an emphasis on parks and open-space systems in the adaptive reuse of urban sites. Projects focus on the creation and cultivation of public space, transformation of site conditions, and development of sustainable site elements. Emphasizes site analysis, development of an individual design process, and design communication strategies. This studio course introduces students to urban design precedents, site research, and remediation methods through case studies, lectures, site visits, and workshops.

LARC 2140. Designed Urban Ecologies. 6 Hours.
Continues LARC 2130. Focuses on sustainable community/campus/neighborhood design at the intersection of large-scale urban and environmental systems. Primary topics include mixed-use programming in relation to systems ranging from zoning and transit to the material flows of human and wildlife habitats. This studio course introduces basic geographical information systems (GIS) and application of landscape ecology principles. Projects examine the role of landscape systems and the formation and reformulation of land development scenarios.

LARC 2230. Site Materials and Methods. 4 Hours.
Introduces fundamental techniques of sustainable site engineering in the urban realm, including earthworks, water, and vegetal systems. Primary topics include grading, storm water management, urban plants, and basic site elements such as retaining walls, paving systems, and landscape on structure.

LARC 2240. Sustainable Site Construction and Detailing. 4 Hours.
Continues LARC 2230. Focuses on construction technologies, methods, and materials for sustainable site elements, including environmental performance infrastructures, circulation systems, and basic site structures. Introduces structural systems for site work via lecture and in-class exercises.

LARC 2330. Cities, Landscape, and Modern Culture. 4 Hours.
Presents the themes, core theories, and iconic works that gave shape to modernism in landscape architecture and urbanism. Focusing on the eighteenth-century through mid-twentieth-century projects and designers, lectures examine contextual factors and resulting formal, spatial, organizational, and material characteristics of built works. Offers students an opportunity to practice formulation of a critical design perspective via reading responses, project analysis, written work, and exams.

LARC 2340. Cities, Landscape, and Contemporary Culture. 4 Hours.
Presents the themes, core theories, and iconic works that shape the field of contemporary landscape architecture and urbanism. Focusing on the late twentieth century through contemporary projects and designers, lectures examine contextual factors and resulting formal, spatial, organizational, and material characteristics of built works. Offers students an opportunity to practice formulation of a critical design perspective via reading responses, project analysis, written work, and exams.

LARC 2430. Plant Identification. 4 Hours.
Focuses on identification of structural, growth, and community characteristics of woody plant materials. Presents plant materials as design elements with diverse cultural uses as well as ecological agents of environmental change. Combines lectures with field visits.

LARC 2440. Planting Design. 4 Hours.
Combines horticultural and ecological field study with studio design exercises to deliver introductory to advanced planting design techniques. Primary topics include how to design phytoremediation strategies for contaminated sites, seasonal planting considerations, strategic phasing, and maintenance techniques. This is a workshop-based course.

LARC 2990. Elective. 1-4 Hours.
Offers elective credit for courses taken at consortium institutions. May be repeated without limit.

LARC 3155. Studio Abroad. 6 Hours.
Offers students an opportunity to learn sustainable landscape and urban design techniques in an international setting. Key topics include cultural influences on urban revitalization and ecological restoration, innovative material and site technologies, regional best management practices (BMPs), and integration of diverse historical influences into the design process.

LARC 3170. Landscape Planning and Urbanism Studio. 6 Hours.
Introduces sustainable landscape planning techniques with an emphasis on adaptive urbanism. Key topics include the designed and managed relationship of cities to their regional ecologies, such as sub/urbanized watersheds and coastal zones, as well as the spatial, material, and programmatic roles of environmental infrastructures in the civic landscape. Particularly emphasizes the market-based integration of recreation, transit, food, housing, and industrial networks with living systems such as urban forests, riparian corridors, managed habitats, and constructed wetlands.

LARC 3990. Elective. 1-4 Hours.
Offers elective credit for courses taken at consortium institutions. May be repeated without limit.

LARC 4970. Junior/Senior Honors Project 1. 4 Hours.
Offers students an opportunity to develop research toward an in-depth project related to the student’s major. Can be combined with Junior/Senior Honors Project 2 or a college-defined equivalent for an 8-credit honors project.

LARC 4971. Junior/Senior Honors Project 2. 4 Hours.
Offers students an opportunity to complete a research or design project related to the student’s major.

LARC 4992. Directed Study. 1-4 Hours.
Offers independent work under the direction of members of the department on a chosen topic. Course content depends on instructor. May be repeated without limit.
LARC 4993. Independent Study. 1-4 Hours.
Offers students an opportunity for independent work under the direction of members of the department. Course content determined by instructor in relation to student’s course of study. May be repeated up to 15 times for up to 16 total credits.

LARC 4994. Internship. 4 Hours.
Offers students an opportunity for internship work. May be repeated up to three times.

LARC 4996. Experiential Education Directed Study. 4 Hours.
Offers students an opportunity to integrate directed study work overseen by department faculty with approved experiential experience(s). Restricted to students using the course to fulfill the experiential education requirement. May be repeated up to three times.

LARC 5110. Advanced Design for Urban Environments Studio. 6 Hours.
Focuses on ecological, economic, and social resiliency of designed urban environments in response to globalization. Contemporary case studies of urban change provide the basis for design investigation into issues such as the impact of shifting industries on Detroit (deurbanization) or Shenzhen (rapid densification); shifting weather and water patterns in densely populated regions; societal shifts, from generational demographics to political upheavals and militarization/demilitarization of the urban landscape. Emphasizes the integration of interdisciplinary perspectives and advanced design analysis, conceptualization, and visualization skills into development of a global perspective on managing change in the built environment.

LARC 5120. Comprehensive Design Studio. 6 Hours.
Offers students an opportunity to design and develop a site or district including all of its requisite systems. Students draw on their landscape architectural education to produce a design both responsive to specific criteria and prototypical of ways to build sustainable and adaptable public landscapes—often described as “resilience.” Projects are expected to respond to and integrate their contexts (urban, environmental, climatic, and economic); meet spatial, performative, and programmatic requirements and technical demands (materials, implementation and management strategies); and dynamic processes at play within and around the project site.

LARC 5210. Landscape Ecology. 4 Hours.
Introduces fundamental-to-advanced concepts in the field of landscape and urban ecology. Focuses on the landscape-scale spatial structure, temporal patterns, and geographic ranges produced by the intersection of large-scale environmental and human processes. Emphasizes spatial taxonomies (patch, corridor, mosaic, granularity, edge, ecotone) produced across diverse landscape types influenced by human development and landscape dynamics in the built environment (disturbance, fragmentation, accumulation, and succession). Incorporates basic techniques in geographic-information-system software.

LARC 5220. Sustainable Landscape Practices. 4 Hours.
Offers a lecture/workshop/field-based course that builds upon landscape technology skills introduced in LARC 2230 and LARC 2240, with a focus on ecotechnologies operating in the built environment. Core topics include design and implementation metrics, material life-cycle management, funding models, and aesthetic and cultural aspects. Potential topics include green roofs, green walls, bioswales, pervious pavements, constructed wetlands, “complete street” elements, geosensor networks, alternative waste management, water detention and energy generation methods, and living infrastructures for coastal environments.

LARC 5310. Urban Landscape Seminar. 4 Hours.
Offers a discussion-based seminar focusing on case studies of influential works in contemporary landscape, urbanism, and sustainable environmental design. Encourages students to seek interdisciplinary perspectives toward development of critical-thinking skills in relation to forces shaping urban environments in contemporary global culture. A diverse range of material from published design criticism to open-source social media engagement provides basis for discussion and written and oral presentations.

LARC 5420. Professional Practice in Landscape Architecture. 4 Hours.
Offers a lecture- and case-study-based course focusing on strategic planning, business models, organizational structures, logistics, and regulatory paradigms associated with professional practice in landscape architecture. Core topics provide an overview of common technical and business procedures, including RFQs; RFPs; marketing, public relations, and client management; hiring and human resource management; review board/regulatory boards; permitting; and licensure.