



### ***Twin Cities Campus***

## **Landscape Design and Planning B.E.D.**

*Landscape Architecture, School of*

### **College of Design**

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2017
- Required credits to graduate with this degree: 120
- Required credits within the major: 72 to 83
- Degree: Bachelor of Environmental Design

Landscape design and planning focuses on creating livable communities that sustain ecological function; fulfill human aspirations for community development, public health, and safety; and are artistically evocative and meaningful. Core courses in design and planning introduce students to the history, theory, and practice of landscape design and planning at various geographic scales and in diverse settings. Students create integrative, collaborative, and beautiful designs for regions, communities, and sites to conserve ecosystems services and water and air resources, protect biodiversity, and to reduce dependence on fossil fuels.

### **Program Delivery**

This program is available:

- via classroom (the majority of instruction is face-to-face)

### **Admission Requirements**

A GPA above 2.0 is preferred for the following:

- 2.80 already admitted to the degree-granting college
- 2.80 transferring from another University of Minnesota college
- 2.80 transferring from outside the University

For information about University of Minnesota admission requirements, visit the [Office of Admissions website](#).

### **General Requirements**

All students are required to complete general University and college requirements including writing and liberal education courses. For more information about University-wide requirements, see the [liberal education requirements](#). Required courses for the major or minor in which a student receives a D grade (with or without plus or minus) do not count toward the major or minor (including transfer courses).

### **Program Requirements**

#### **Design**

- LA 1201 - Learning from the Landscape [AH, DSJ] (3.0 cr)
- LA 1401 - The Designed Environment [AH] (3.0 cr)
- LA 3001 - Understanding and Creating Landscape Space (4.0 cr)
- LA 3002 - Informants of Creating Landscape Space (4.0 cr)
- LA 3003 - Climate Change Adaptation (3.0 cr)
- LA 4001 - Sustainable Landscape Design and Planning Practices Studio (4.0 cr)
- LA 4096 - Internship in Landscape Design and Planning (1.0 cr)
- LA 4755 ~~{Inactive}~~[TS] (3.0 cr)

#### **Design Communication**

- LA 1301 - Introduction to Landscape Architecture Drawing [AH] (3.0 cr)
- LA 2301 - Mixed Analog and Digital Representation Methods (3.0 cr)

#### **Ecosystem Pattern and Process Core**

- ESPM 3108 - Ecology of Managed Systems [ENV] (3.0 cr)
- HORT 1001 - Plant Propagation [BIOL] (4.0 cr)
- LA 3501 - Environmental Design and Its Biological and Physical Context [ENV] (3.0 cr)
- LA 3204 - Holistic Landscape Ecology and Bioregional Practice (3.0 cr)
- LA 3571 - Landscape Construction: Site Systems and Engineering (3.0 cr)

#### **Social and Cultural Systems Core**

- LA 3413 - Introduction to Landscape Architectural History [HIS, GP] (3.0 cr)
- ARCH 3711W - Environmental Design and the Sociocultural Context [SOCS, CIV, WI] (3.0 cr)



### Upper-division Writing Intensive within the major

Students are required to take one upper-division Writing Intensive course within the major. If that requirement has not been satisfied within the core major requirements, students must choose one course from the following list. Some of these courses may also fulfill other major requirements.

Take 0 - 1 course(s) from the following:

- [ARCH 3711W](#) - Environmental Design and the Sociocultural Context [SOCS, CIV, WI] (3.0 cr)
- [ARCH 4701W](#) - Introduction to Urban Form and Theory [WI] (3.0 cr)
- [EEB 4609W](#) - Ecosystem Ecology [ENV, WI] (3.0 cr)
- [ESPM 4061W](#) - Water Quality and Natural Resources [ENV, WI] (3.0 cr)
- [FNRM 4232W](#) - Managing Recreational Lands [WI] (4.0 cr)
- [FW 5603W](#) - Habitats and Regulation of Wildlife [WI] (3.0 cr)
- [GEOG 3361W](#) *{Inactive}* [WI] (3.0 cr)
- [GEOG 3371W](#) - Cities, Citizens, and Communities [DSJ, WI] (3.0 cr)
- [HORT 4061W](#) - Turfgrass Management [WI] (3.0 cr)
- [URBS 3001W](#) - Introduction to Urban Studies: The Complexity of Metropolitan Life [WI] (3.0 cr)
- [URBS 3301W](#) *{Inactive}* [WI] (3.0 cr)

## Program Sub-plans

Students are required to complete one of the following sub-plans.

### Accelerated Program

This sub-plan is optional and does not fulfill the sub-plan requirement for this program.

The accelerated status option admits a limited number of students annually and allows qualified undergraduates to complete the B.E.D. and M.L.A. in six years rather than seven years.

Applicants for the accelerated status must complete the first three years of the B.E.D. degree requirements before their senior year. Students must complete the first year of the professional degree program in their undergraduate senior year. These courses carry upper division credit and satisfy senior year B.E.D. requirements.

Accelerated status is granted on a competitive basis and does not admit any student to the graduate professional program. Separate requirements, such as letters of recommendation, a letter of interest, and other application documents, must be submitted in January of the year that students are seeking admission to the graduate program. B.E.D. graduates who have completed the accelerated status option and applied to the M.L.A. professional degree program will receive advanced standing in the M.L.A. program upon acceptance by the Department of Landscape Architecture and the Graduate School.

### Landscape Design

The design track prepares students for a career in the design of sustainable landscapes at the residential and small-scale commercial level.

The landscape design track also requires students to take courses in biological science, plant materials, landscape management, and small business management.

### Landscape Design--Ecosystem Pattern and Process

- [HORT 1015](#) - Plant Families for Plant People (4.0 cr)
- [HORT 4061W](#) - Turfgrass Management [WI] (3.0 cr)
- [MATH 1031](#) - College Algebra and Probability [MATH] (3.0 cr)
  - or [MATH 1051](#) - Precalculus I [MATH] (3.0 cr)
  - or [MATH 1142](#) - Short Calculus [MATH] (4.0 cr)
  - or [MATH 1151](#) - Precalculus II [MATH] (3.0 cr)
  - or [MATH 1271](#) - Calculus I [MATH] (4.0 cr)
  - or [MATH 1272](#) - Calculus II (4.0 cr)

### Landscape Design--Social and Cultural Systems

- [MGMT 3015](#) - Introduction to Entrepreneurship (4.0 cr)
- [APEC 1101](#) - Principles of Microeconomics [SOCS, GP] (4.0 cr)
  - or [ECON 1101](#) - Principles of Microeconomics [SOCS, GP] (4.0 cr)

### Chemistry

- [CHEM 1015](#) - Introductory Chemistry: Lecture [PHYS] (3.0 cr)
- [CHEM 1017](#) - Introductory Chemistry: Laboratory [PHYS] (1.0 cr)
- or [CHEM 1061](#) - Chemical Principles I [PHYS] (3.0 cr)
- [CHEM 1065](#) - Chemical Principles I Laboratory [PHYS] (1.0 cr)



### Landscape Planning

The landscape planning track prepares students for work planning sustainable landscape at the urban and regional scale.

The landscape planning track requires additional courses in urban geography, urban and regional planning, natural resource planning and management, as well as biological and physical sciences. Students in this track should select GEOG 1502 to complete the mathematical thinking requirement.

#### Landscape Planning--Ecosystem Pattern and Process

**FNRM 3131** - Geographical Information Systems (GIS) for Natural Resources [TS] (4.0 cr)

LA 3004 *{Inactive}*(4.0 cr)

LA 3514 *{Inactive}*[CIV] (3.0 cr)

or LA 5514 *{Inactive}*(3.0 cr)

Take 2 or more course(s) from the following:

- **BBE 3023** - Ecological Engineering Principles (3.0 cr)
- **BBE 5513** - Watershed Engineering (3.0 cr)
- **CEGE 3501** - Introduction to Environmental Engineering [ENV] (3.0 cr)
- **EEB 3603** - Science, Protection, and Management of Aquatic Environments (3.0 cr)
- **EEB 4609W** - Ecosystem Ecology [ENV, WI] (3.0 cr)
- **ESCI 3002** - Climate Change and Human History [ENV] (3.0 cr)
- **ESCI 3004** - Water and Society [ENV] (3.0 cr)
- **ESCI 3005** - Earth Resources (3.0 cr)
- **ESCI 4701** - Geomorphology (4.0 cr)
- **ESCI 4703** - Glacial Geology (4.0 cr)
- **ESPM 3101** *{Inactive}*(3.0 cr)
- **ESPM 3111** - Hydrology and Water Quality Field Methods (3.0 cr)
- **ESPM 3221** - Soil Conservation and Land-Use Management (3.0 cr)
- **ESPM 3575** - Wetlands (3.0 cr)
- **ESPM 4061W** - Water Quality and Natural Resources [ENV, WI] (3.0 cr)
- **FNRM 3104** - Forest Ecology (4.0 cr)
- **FNRM 3114** - Hydrology and Watershed Management (3.0 cr)
- **FNRM 3203** - Forest Fire and Disturbance Ecology (3.0 cr)
- **FNRM 5153** - Forest Hydrology & Watershed Biogeochemistry (3.0 cr)
- **FW 5603W** - Habitats and Regulation of Wildlife [WI] (3.0 cr)
- **GEOG 3401W** - Geography of Environmental Systems and Global Change [ENV, WI] (3.0 cr)
- **HORT 5071** - Ecological Restoration (4.0 cr)
- **LAAS 5515** - Soil Formation: Earth Surface Processes and Biogeochemistry (3.0 cr)
- **PMB 4321** - Minnesota Flora (3.0 cr)
- **SOIL 5555** - Wetland Soils (3.0 cr)
- **URBS 3751** - Understanding the Urban Environment [ENV] (3.0 cr)

#### Landscape Planning--Social and Cultural Systems

**GEOG 3371W** - Cities, Citizens, and Communities [DSJ, WI] (3.0 cr)

Take one course from the following

- ARCH 4671 *{Inactive}*(3.0 cr)
- or **ARCH 4701W** - Introduction to Urban Form and Theory [WI] (3.0 cr)
- or **DES 3331** - Street Life Urban Design Seminar (3.0 cr)
- or **ESPM 3245** - Sustainable Land Use Planning and Policy [ENV] (3.0 cr)
- or **FNRM 4501** - Urban Forest Management: Managing Greenspaces for People (3.0 cr)
- or **GEOG 3361W** *{Inactive}*[WI] (3.0 cr)
- or **GEOG 3373** - Changing Form of the City [HIS, GP] (3.0 cr)
- or **GEOG 3376** - Political Ecology [ENV] (3.0 cr)
- or **GEOG 3973** - Geography of the Twin Cities [SOCS] (3.0 cr)
- or **GEOG 5393** *{Inactive}*(4.0 cr)
- or **PA 4200** - Urban and Regional Planning (3.0 cr)
- or **PA 5013** - Law and Urban Land Use (1.5 cr)
- or **PA 5211** - Land Use Planning (3.0 cr)
- or **PA 5221** - Private Sector Development (3.0 cr)
- or **PA 5251** - Strategic Planning and Management (3.0 cr)
- or **PA 5253** *{Inactive}*(3.0 cr)
- or **FNRM 4232W** - Managing Recreational Lands [WI] (4.0 cr)
- or **URBS 3001W** - Introduction to Urban Studies: The Complexity of Metropolitan Life [WI] (3.0 cr)
- or **URBS 3301W** *{Inactive}*[WI] (3.0 cr)
- or **URBS 3751** - Understanding the Urban Environment [ENV] (3.0 cr)