College of Architecture and Landscape Architecture

This is the College of Architecture and Landscape Architecture section of the 1999-2000 Undergraduate Catalog of the University of Minnesota.

Content:
- Admission .......................................................... 59
- Degrees/Majors ....................................................... 59
- Minors .................................................................. 60
- Graduation Requirements ...................................... 60
- Professional Registration ...................................... 60
- Advising ................................................................. 60
- Policies .................................................................. 60
- Special Learning Opportunities and Resources .......... 61
- International Programs ......................................... 61
- Career Information ............................................... 61
- Student Organizations .......................................... 61
- Directory ............................................................... 61
- Degree Program .................................................... 62
  - Environmental Design ......................................... 62
College of Architecture and Landscape Architecture

The College of Architecture and Landscape Architecture (CALA) is dedicated to advancing the quality and value of the designed environment. This pursuit addresses fundamental questions about the meaning and experience of people’s physical settings. Landscapes, cities, and buildings are the focus of study.

Central to CALA’s mission is design education. Design is taught as the fundamental means by which architects, landscape architects, and urban designers give shape to and explore their ideas. An effective design education develops creative powers of generalization and abstraction through analysis and synthesis; a broad understanding of the arts, humanities, and sciences; a knowledge of the principles of the discipline’s appropriate technology, history, theory, and professional practice; the skills necessary for the description, exploration, evaluation, and development of design ideas; and the conviction that appropriate aesthetic and ethical values are a professional responsibility.

CALA’s mission is pursued within the guidelines of the National Architectural Accrediting Board (NAAB), the Association of Collegiate Schools of Architecture (ACSA), and the Landscape Architectural Accreditation Board (LAAB).

Facilities—In addition to classroom, studio, and office space, the college has specialized facilities available for student use. To support design studio activities, the CALA woodshop and its staff provide the tools and skills needed to turn ideas into objects. The CALA imaging lab provides photographic studio facilities and equipment for documenting projects, computer workstations for film scanning and digital video editing, and videos of lectures and presentations given by distinguished teachers and practitioners. The CALA slide library houses a collection of approximately 100,000 slides to support student and faculty research and educational activities. The Architecture and Landscape Architecture library provides full library services and has a collection of more than 32,000 volumes. The CALA computing center, open seven days a week, supports several operating systems and a wide variety of graphics software, including AutoCAD and ESRI Geographic Information Systems (GIS) applications, flat bed and slide scanners, large-format plotters, a variety of printers, and video capabilities.

Addition and Renovation—CALA has begun a project to renovate and add to its existing building. When completed, the project will provide the space necessary to unite all the activities of the college. The renovation component will provide improved design studios, additional class/jury rooms, research facilities, faculty and administrative offices, and student facilities.

The proposed addition calls for a new library, lecture space, and additional studio area. It will function as a living laboratory of architecture and landscape architecture, showcasing and monitoring the diverse and extensive building products industry of the state. Anticipated date for completion is fall 2001.

The Design Center for American Urban Landscape (DC/AUL)—DC/AUL is a research unit within CALA. DC/AUL develops interactive educational projects in neighborhoods and communities, projects that address national urban design and planning issues. Students, professionals, and community leaders collaborate and learn about making urban landscapes through working together on these projects. The Design Center’s mission is to educate public and private decision makers, professionals, and citizens about the value of design as a strategic partner with economic and human interests in the making of community-based development strategies and sustainable urban landscapes.

Admission

Freshman Admission—Students in their senior year of high school, or those who have a high school degree or recognized equivalent but have not studied at the college or university level, should apply through the Office of Admissions, 240 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455.

Admission to the Major—B.A. students are admitted to the major in architecture after completing required pre- architecture courses and at least 60 credits (including current enrollment) with a 2.50 GPA overall and in Architecture and Landscape Architecture courses with at least a 2.0 in each. Students transferring from other institutions must be admitted to the University before being admitted to the upper division major.

Students enrolled at the University may declare an environmental design major at any point by filing an Application for Change of College or Status. Students transferring into the University may declare an environmental design major immediately upon admission.

High School Preparation Requirements—If students have not satisfied high school preparation requirements, they will not be admitted to the architecture major or B.E.D. in landscape architecture and therefore will not be allowed to take upper division program courses. See “Freshman Admission” in the General Information section of this catalog.

Degrees/Majors

Undergraduate—CALA offers a nonprofessional undergraduate landscape architecture degree; a bachelor of environmental design (B.E.D.); and, in cooperation with the College of Liberal Arts (CLA), a nonprofessional undergraduate bachelor of arts degree (B.A.) with a major in architecture. CALA also offers a second nonprofessional undergraduate architecture degree program that includes an accelerated status option to allow qualified undergraduates to complete the undergraduate and M.Arch. degrees in six years rather than seven.

Graduate—In conjunction with the Graduate School, CALA offers both professional and postprofessional graduate degree programs in architecture and landscape architecture. Descriptions of these programs are provided in the Graduate School Catalog.
Minors

Both of CALA’s undergraduate degree programs incorporate a minor or elective concentration (a minimum of 18-21 approved 3xxx-5xxx credits), allowing the student to develop a theme of study and broaden the social, cultural, and international aspects of design. Courses for a minor are taken from a single department; courses for an elective concentration can be taken from a number of different departments. Students may declare a minor in any University department or program offering such an option. At graduation the minor is listed on students’ transcripts with their degree and major (an elective concentration is not listed). CALA offers a minor in architecture and a minor in environmental design in landscape architecture.

Graduation Requirements

Students are recommended for graduation after they complete the prescribed curriculum, including required and elective courses to meet the total number of credits required; earn a minimum cumulative GPA of 2.00 overall and in their major; and complete the necessary paperwork and meet the application deadlines.

Two semesters before the expected graduation date, students should have an approved graduation check sheet on file with their department and the college office. In addition, students must turn in their graduation application to the Office of the Registrar. (Deadline extensions are not granted.)

Note: The College of Liberal Arts (CLA) grants a B.A. with a major in architecture. Students should check the CLA section of this catalog for information on CLA graduation.

Professional Registration

CALA provides Minnesota’s only accredited professional degree programs in architecture (the M.Arch.) and landscape architecture (the M.L.A.).

As of 1990, all candidates for professional registration must graduate from a nationally accredited professional degree program (or its foreign equivalent) and complete three years of professional work experience to be eligible to take the state registration examination. Registration as an architect or landscape architect is a legal requirement to practice in Minnesota and most states in the country. Further, a professional license is required before an individual may use the designation of architect or landscape architect in any capacity.

For more information concerning professional registration, contact the Minnesota Board of Architecture, Engineering, Land Surveying and Landscape Architecture, and Interior Design (612/296-2388).

Advising

CALA Student Affairs Office—Prospective student advising provides general information about CALA’s degree programs, related professional fields in architecture and landscape architecture, admission and program requirements, and college services and refers prospective graduate students to the appropriate department director of graduate studies.

Department Advisers—Departments use a combination of faculty and staff advisers. Typically undergraduate majors are advised by the department’s director of undergraduate studies. Architecture majors may also be advised by the architecture department’s student services adviser; landscape architecture majors may be advised by the department’s undergraduate landscape adviser.

Policies

Course Load—The average course load per semester for CALA undergraduates is five courses (13-16 credits) to graduate in four years without taking summer session courses. One credit requires an average of three hours of work each week. Carrying more than 21 credits requires special permission from the college scholastic committee.

Repeating Courses—Students may repeat courses in which they receive a grade of D or less. Students are not allowed to repeat for credit courses in which they receive a C or better.

Petition Procedures—Petitions are required for deviations from either college or major requirements. CALA students can pick up petition forms from either the CALA Student Affairs or department offices. Petitions are submitted to the department adviser and then forwarded to the CALA Student Affairs Office for a decision. A successful petition requires both college and department approval. To substitute a course for a requirement, the petition must be approved before the student registers for the course. Students should be sure their petitions have been approved before they register.

Academic Progress—Students are expected to make satisfactory progress toward their degree objectives. This means earning grades of A, B, C, or S in most courses and completing courses undertaken. For students with concerns about their academic progress, early consultation with instructors or an adviser is recommended. CALA evaluates academic progress and scholastic standing using semester and cumulative GPA reviews.

Student Conduct—CALA expects the highest standard of honesty and integrity in the academic performance of its students. When a case of scholastic dishonesty arises, the CALA faculty member who is the instructor for the course may modify the grade for the examination or piece of work in question or the course itself, or may refer the incident to the department head or the appropriate committee. In any case, the instructor must report to the department and to CALA the incident and the action he or she takes. At the time of the action, the student is informed by the instructor of his or her right to ask for a hearing by the committee dealing with student conduct cases. Information on this process is available from the college office.

If a student’s infraction involves both CALA judicial proceedings and court proceedings and if a CALA decision might prejudice the court case, CALA will hold its decision in abeyance until the court proceedings have been concluded.

Grievances—Students with complaints or criticisms about courses or academic policies have recourse through grievance procedures. They are expected to first confer with the course instructor. If no satisfactory solution is reached, the complaint should be presented to the department head. If these informal processes fail, a department-level committee will hear the evidence. Further appeals go to college-level and University-level committees. The CALA program adviser in 110 Architecture Building is a competent source for interpreting college procedures and regulations and can often suggest suitable alternatives to solve a problem.
Rights to student work—The College of Architecture and Landscape Architecture reserves the right to retain for archival or exhibition purposes any student work executed as part of a CALA instructional program. In addition, the college reserves the right to document, reproduce, and publish images of any such student work in college publications, printed or electronic, for research, publicity, and outreach, giving publication credit to the creator/student.

Special Learning Opportunities and Resources

Summer Honors College for High School Students—Each summer CALA offers architecture-related learning opportunities for talented high school students through the Summer Honors College. This program provides students with an interdisciplinary, hands-on approach to the building arts, as well as an opportunity to explore a broad range of other subjects while receiving college credit.

Visiting Lecturers and Critics—The CALA Lecture Series, aided by funding from supportive alumni and professionals, brings several nationally and internationally known practitioners and educators to the college each semester to address students, faculty, and interested practitioners on various topics in architecture, landscape architecture, and urban design. In addition, CALA has endowment funds designated to support visits by outstanding scholars. The H. W. S. Cleveland Visiting Professorship in Landscape Architecture and the Cass Gilbert Visiting Land-Grant Chair in Architecture endowments provide support for distinguished visitors who typically conduct seminars, give lectures, and, when appropriate, participate in design studio reviews. Students also receive design critiques from local and regional educators and practitioners during end-of-semester reviews.

Continuing Education—CALA offers selected preprofessional and professional courses through University College. Continuing professional education courses and reviews for the architectural registration examination are also offered. For more information, consult the University College Catalog.

International Programs

Students are encouraged to incorporate a study abroad experience into their degree program. Each year CALA has arranged study trips for architecture and landscape architecture professional degree students to a variety of locations. In recent years these have included Europe, China, Meso-America, the Middle East, and the American Southwest. Additionally, the college has offered an undergraduate study abroad program in Mexico. An exhibition of student work from the study abroad program is held at the beginning of fall semester.

For more information, contact the International Study and Travel Center, 48 Coffman Memorial Union (612/626-4782); the Global Campus, 102 Nicholson Hall (612/626-9000); or the CALA Student Affairs Office (612/626-1000).

Career Information

CALA departments have a long history of close association with their respective professional communities. Design professionals teach in the studios as adjunct faculty, and students are strongly encouraged to gain professional work experience before graduating from their professional degree program. A portion of the student’s work experience may be applied to the three-year practice requirement for the professional registration examination.

Student Organizations

Membership and participation in student organizations adds a valuable dimension to a student’s academic career and contributes to professional development.

American Institute of Architecture Students (AIAS)—This independent, student-run organization informs students of current issues in architecture and promotes excellence in architectural education. AIAS is involved in various activities on local and national levels, including competitions, design charrettes, social activities, portfolio workshops, and college committee membership. In addition, AIAS works in conjunction with the America Institute of Architects and local firms to give students a tangible connection to the profession. A-Käffe is a volunteer student-run espresso cart within the Architecture Building. CALA students operate a cooperative that sells art and design supplies to students at a significant discount.

Minnesota Chapter of the American Society of Landscape Architecture Students (MASLAS)—This group, affiliated with the American Society of Landscape Architects, informs students of current issues in landscape architecture and provides an excellent connection to the profession. The group is involved in various activities, including the lecture series, competitions, design charrettes, social activities, and portfolio workshops.

CALA Student Board—The student board consists of 12 advanced undergraduate and graduate students. The board works toward the continued growth of a good working academic environment for students and faculty.

CALA Mentor Program—The mentor program has its roots as a student-founded and student-run organization. The mission of the program is to foster meaningful relationships between students and professionals of architecture, landscape architecture, and related fields.

Directory

(area code 612)

Administrative Offices

Office of the Dean
125 Architecture Building, Minneapolis
626-9068
Student Services
110 Architecture Building, Minneapolis
626-1000

Departments and Programs

Department of Architecture
110 Architecture Building, Minneapolis
624-7866

Department of Landscape Architecture
110 Architecture Building, Minneapolis
625-6860

Design Center for American Urban Landscape
Suite 222, 1313 Fifth Street S.E., Minneapolis
627-1830

Landscape Studies Center
1425 University Avenue S.E., Minneapolis
625-6860

CALA World Wide Web Site
<www.cala.umn.edu/>
Environmental Design

Department of Landscape Architecture

B.E.D.
Landscape architecture integrates the design, planning, and management of the landscape to create environments that combine ecological function and human aspirations for community, health and safety, and beauty. Projects include large-scale regional landscape planning; design of exterior environments for working, living, and recreation; commercial, institutional, and industrial development; transportation systems; and multiple-use areas. Professional services include studies of land-use allocation and management, detail grading, construction drawings, and planting plans. Landscape architects often collaborate on projects with other professionals such as architects, planners, engineers, geographers, physical scientists, biologists, ecologists, and social scientists.

The Department of Landscape Architecture offers three degrees: the preprofessional bachelor of environmental design in landscape architecture (B.E.D.); the professional master of landscape architecture (M.L.A.), required to become a registered landscape architect; and the master of science (M.S.), a research-oriented degree allowing a specialized focus within landscape architecture.

The three degree programs seek to integrate landscape design with an ecological understanding of natural and cultural systems. National leadership in research, active testing of design ideas at the local and national level, and the integration of these experiences into the classroom offer a powerful springboard for design innovation. Collaborative opportunities within the college and University allow students to explore and realize the potentials of landscape architecture and the need for ecological responsibility in design and planning.

Admission Requirements—Students enrolled at the University may declare an environmental design major at any point in their academic career. Students declare an environmental design major by filing an Application for Change of College or Status; students designate CALA as the college to which transfer is requested, with a major in environmental design.

Students transferring into the University may declare an environmental design major immediately upon admission.

Degree Requirements
To complete the degree, students must complete at least 120 credits, including at least 55 credits in the major. Students must complete all program, college, and University requirements including the University of Minnesota-Twin Cities liberal education requirements. All LA-designated courses must be taken A-F, with grades of C or better. The B.E.D. in landscape architecture provides a broad background in the biological, physical, and social sciences and the liberal arts as they apply to design. Courses introduce students to the history, theory, and practice of landscape architecture. Design experiences are supplemented by courses in representation, technology, history, and theory. The B.E.D. program may be used as preparation for professional study in landscape architecture or related fields at the graduate level, or for employment in the environmental design and planning fields that does not require an accredited professional degree.

The department also offers an accelerated status option through the B.E.D. 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 the Graduate Record Examination (GRE) 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.

**Required Courses**

**I. Foundation Courses**

**Landscape Architecture**
- LA 1301—Introduction to Drawing in Architecture and Landscape Architecture (3 cr)
- LA 1401—The Designed Environment (3 cr)

**General Education**
- Rhet 1101—Writing to Inform, Convince, and Persuade (4 cr)
- Rhet 1223—Oral Presentations in Professional Settings (3 cr)

The following courses are recommended (not required) to fulfill CLA’s liberal education requirement for at least 8 credits of physical and biological sciences:

- Biol 1001—Introductory Biology I—Evolutionary and Biological Perspectives (4 cr)
- Biol 1009—General Biology (4 cr)
- Geog 1403—Biogeography of the Global Garden (4 cr)
- Geo 1001—The Dynamic Earth: An Introduction to Geology (4 cr)
- Geo 1004—Physical and Historical Geology of Minnesota (4 cr)
- Soil 1125—The Soil Resource (4 cr)

The following courses are recommended (not required) to fulfill CLA’s liberal education requirement for at least 6 credits of social sciences:

- Geog 1301—Introduction to Human Geography (4 cr)
- Geog 3371—Introduction to Urban Geography (3 cr)
- Geog 3373—The Changing Form of the City (3 cr)

**II. Advanced Courses**

**Landscape Architecture**
- Arch 3301—Drawing for Design in Architecture (3 cr)
- Arch 3401—Environmental Design and the Sociocultural Context (3 cr)
- LA 3411—Architectural History to 1750 (3 cr)
- LA 3412—Architectural History since 1750 (3 cr)
- LA 5413—Introduction to Landscape Architectural History (3 cr)
- LA 3501—Environmental Design and its Biological and Physical Context (3 cr)
- Phil 3502—Introduction to Aesthetics (4 cr)
- LA 3001—Introduction to Landscape Architectural Design (3 cr)
- EEB 3001—Ecology and Society (3 cr)
- FR 4131—Geographical Information Systems for Natural Resource Analysis (3 cr)
- LA 5204—Landscape Ecology (3 cr)
- LA 5571—Landscape Construction: Landform Systems and Spatial Performance (4 cr)

The following courses are recommended (not required) to fulfill the three-course (9-12 cr) electives in landscape planning and design:

- Arch 5452—Architectural Design: Form, Order, and Meaning (3 cr)
- Arch 5711—Design Principles of the Urban Landscape (3 cr)
- Arch 5724—Meanings of Place (3 cr)
- FR 4501—Urban Forest Management (3 cr)
- Geog 3361—Land Use, Landscapes, and the Law (3 cr)
- Geog 5605—Geographical Perspectives on Planning (4 cr)
- Hort 4021—Landscape Design, Implementation and Management I (4 cr)
- Hort 5021—Landscape Design, Implementation and Management II (4 cr)
- LA 1101—Introduction to Design Thinking (4 cr)
- NRES 3245—Recreation Policy and Landscape-Level Planning (3 cr)
- NRES 4395—Natural Resource Planning (3 cr)
- PA 5211—Introduction to Land Use Planning (3 cr)
- PA 5241—Environmental Planning (3 cr)

**General Education**
- Rhet 3562—Technical and Professional Writing (3 cr)

The following courses are recommended (not required) to fulfill the two-course requirement at the 4xxx-5xxx level (6-8 cr) in the physical and biological sciences:

- AgET 4223—Hydrology and Water Quality (3 cr)
- EEB 4002—Ecology of Minnesota (2 cr)
- EEB 4014—Ecology of Vegetation (3 cr)
- EEB 4016—Ecological Biogeography (3 cr)
- EEB 4601—Limnology (3 cr)
- EEB 4609—Ecosystem Ecology (3 cr)
- FR 4114—Forest Hydrology and Watershed Management (3 cr)
- FR 5104—Forest Ecology (4 cr)
- FR 5153—Forest and Wetland Hydrology (3 cr)
- Geog 5441—Quaternary Landscape Evolution (3 cr)
- Geo 4701—Geomorphology (4 cr)
- Geo 4703—Glacial Geology (4 cr)
- Hort 5071—Restoration and Reclamation Ecology (3 cr)
- NRES 5061—Water Quality: Management of a Natural Resource (3 cr)
- NRES 5575—Wetlands Conservation (3 cr)
- PBio 4321—Taxonomy of Minnesota Flora (3 cr)

**III. Open Electives**

At least 20 credits are required in open elective courses from any program, at any level.

**Minor Requirements**

Students pursuing a minor must complete at least 21 credits. Two courses are required; the remainder are chosen from a list of optional courses.

**Required Courses (6 cr)**
- LA 1401—The Designed Environment (3 cr)
- LA 3413—Introduction to Landscape Architectural History (3 cr)

**Optional Courses (15 cr)**
- Arch 3301—Drawing for Design in Architecture (3 cr)
- Arch 3401—Environmental Design and the Sociocultural Context (3 cr)
- Hort 1012—Woody Landscape Plants (3 cr)
- LA 1301—Introduction to Drawing in Architecture and Landscape Architecture (3 cr)
- LA 3001—Introduction to Landscape Architectural Design (3 cr)
- LA 3501—Environmental Design and its Biological and Physical Context (3 cr)
- LA 5204—Landscape Ecology (3 cr)
- LA 5571—Landscape Construction: Landform Systems and Spatial Performance (4 cr)
- LA 5573—Landscape Technology: Introduction to Geographic Information Systems (3 cr)
- LA 8302—Professional Practice (3 cr)

**Transfer Credits**—A maximum of 9 transfer credits may be used for the minor.

**Overlapping Credits**—A maximum of three courses taken for a major degree may also be used toward the minor.

A minimum grade of C is required in all courses taken for the minor.

**Accelerated Status in Environmental Design**

Applications for the accelerated status option in the B.E.D. program must be submitted by January 15 of the year of desired entry. Admission is for fall only. The following policies and admission procedures change periodically; students should check with their adviser and the Department of Landscape Architecture for current information:

- Apply to the University of Minnesota if not already a student.
- Complete the first three years of the B.E.D. coursework.
- Complete the accelerated status option application form available from the Department of Landscape Architecture, University of Minnesota, 110 Architecture and Landscape Architecture Building, 89 Church Street S.E., Minneapolis, MN 55455 (612/625-6860).
• Submit official transcripts of all coursework at the college, university, or graduate level, including coursework currently being taken. Typically, a student must have a GPA of at least 3.00 for admittance.

• Submit a letter of intent stating the student’s reasons for wanting to be a landscape architect, describing previous experiences in landscape architecture and related fields, and identifying interests and life experiences that may relate to landscape architecture (maximum of two pages).

• Submit a portfolio of art or design work, environmental or design reports, photographs of three-dimensional work, slides, or similar examples of creative work. It is strongly suggested that the portfolio be a bound 8 1/2 x 11-inch booklet. Portfolios larger than 24 x 36 inches will not be accepted. Loose materials are also unacceptable. Slides must be submitted in 8 1/2 x 11-inch transparent slide carrier pages.

The landscape architecture faculty votes on each applicant. The applicant may be admitted to the accelerated status option or continued in the B.E.D. program. It is assumed that students who are accepted will complete their B.E.D. program in the accelerated status option track and apply to the M.L.A. program. Approval for admission is based on
• the student’s academic standing and GPA
• the student’s maturity and experience
• the student’s letter of intent
• the estimated design potential of the student
• the availability of staff and space

Applicants are encouraged to visit the landscape design studios, talk to students who are in the accelerated option track and the M.L.A. program, and find out as much as they can about the profession by talking with landscape architects in their community.

Applicants will be notified of the admission decision by May 15. Successful applicants must notify the department of their intention to enter by June 15 to reserve a position in the program.

During their senior year, students in the accelerated program enroll in the following courses:

First Semester (14 cr)
LA 5201—Making Landscape Spaces and Types (6 cr)
LA 5133—Lake Itasca Landscape Analysis (1 cr)
LA 5371—Computer Methods I (1 cr)
PBio 4321—Taxonomy of Minnesota Flora (3 cr)
Elective course (3 cr)

Second Semester (14 cr)
LA 5203—Ecological Dimensions of Space Making (6 cr)
LA 5372—Computer Methods II (1 cr)
LA 5571—Landscape Construction: Landform Systems and Spatial Performance (4 cr)
Elective course (3 cr)

The University’s Weisman Art Museum was designed by Pritzger Prize-winning architect Frank Gehry.