



Twin Cities Campus

Urban and Community Forestry B.S.

Forest Resources

College of Food, Agricultural and Natural Resource Sciences

• **Students will no longer be accepted into this program after Spring 2007. Program requirements below are for current students only.**

- Program Type: Baccalaureate
- Requirements for this program are current for Spring 2007
- Required credits to graduate with this degree: 120
- Required credits within the major: 120
- This program requires summer terms.
- Degree: Bachelor of Science

The urban and community forestry curriculum prepares students for careers in planning and managing vegetation and natural resources in or near urban communities, and for direct involvement in resource management or for specialized supporting roles in areas such as urban planning and environmental education.

Urban forests include areas along streets and in parks, private lands, greenbelts, and open spaces. Urban foresters help communities plan, design, or protect urban and peri-urban forests; supervise tree selection and planting; and design insect control/disease protection and plant health care programs.

Principle employers for graduates in urban and community forestry include city governments, private tree care and arboricultural consulting companies, state and federal forestry agencies, nurseries, and utility companies. Graduates may also be qualified for traditional forestry positions, including those in the federal government.

Program Delivery

This program is available:

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

Admission Requirements

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

Students going into consulting or private business should choose courses in the forest health and cultural practices of urban forestry. Students interested in managing the urban landscape should concentrate on courses in the management and administration areas.

All required courses must be taken A-F, and students must earn a grade of at least C-.

Communication Skills

[COMM 1101](#) - Introduction to Public Speaking [CIV] (3.0 cr)
or [WRIT 1223](#) *(Inactive)* (3.0 cr)

Mathematical Thinking

[ESPM 1145](#) *(Inactive)* (4.0 cr)
or [MATH 1142](#) - Short Calculus [MATH] (4.0 cr)
or [MATH 1271](#) - Calculus I [MATH] (4.0 cr)
[ESPM 3012](#) - Statistical Methods for Environmental Scientists and Managers [MATH] (4.0 cr)
or [STAT 3011](#) - Introduction to Statistical Analysis [MATH] (4.0 cr)
or [STAT 5021](#) - Statistical Analysis (4.0 cr)



Social Sciences

- ESPM 3261 - Economics and Natural Resources Management [SOCS, ENV] (4.0 cr)
- POL 1001 - American Democracy in a Changing World [SOCS] (3.0 cr)

Physical and Biological Sciences

- PMB 2022 - General Botany (3.0 cr)
- BIOL 1001 - Introductory Biology: Evolutionary and Ecological Perspectives [BIOL] (4.0 cr)
or BIOL 1009 - General Biology [BIOL] (4.0 cr)
- SOIL 1125 *{Inactive}*[ENV] (4.0 cr)
or SOIL 2125 - Basic Soil Science [PHYS, ENV] (4.0 cr)
- Take one of the following pairs of courses.
- CHEM 1011 *{Inactive}*(4.0 cr)
BIOC 2011 - Biochemistry for the Agricultural and Health Sciences (3.0 cr)
or CHEM 1021 *{Inactive}*[PHYS] (4.0 cr)
CHEM 1022 *{Inactive}*[PHYS] (4.0 cr)

Professional Courses

- ESPM 3211 - Survey, Measurement, and Modeling for Environmental Analysis (3.0 cr)
- FNRM 1001 - Orientation and Information Systems (1.0 cr)
- FNRM 3131 - Geographical Information Systems (GIS) for Natural Resources [TS] (4.0 cr)
- ESPM 3241W - Natural Resource and Environmental Policy [SOCS, CIV, WI] (3.0 cr)
- FNRM 4232W - Managing Recreational Lands [WI] (4.0 cr)
- URBS 1001W - Introduction to Urban Studies: The Complexity of Metropolitan Life [WI] (3.0 cr)
- ENT 4251 - Forest and Shade Tree Entomology (3.0 cr)
- FNRM 1101 - Dendrology: Identifying Forest Trees and Shrubs (3.0 cr)
- FNRM 3104 - Forest Ecology (4.0 cr)
- FNRM 3411 - Managing Forest Ecosystems: Silviculture (3.0 cr)
- FNRM 3501 - Arboriculture: Selection and Maintenance of Trees (3.0 cr)
- FNRM 4501 - Urban Forest Management: Managing Greenspaces for People (3.0 cr)
- HORT 1015 - Plant Families for Plant People (4.0 cr)
- HORT 5041W *{Inactive}*[WI] (4.0 cr)
- PLPA 3003 - Diseases of Forest and Shade Trees (3.0 cr)
- PMB 3002 - Plant Biology: Function (2.0 cr)
or FR 4118 *{Inactive}*(3.0 cr)
- ESPM 4061W - Water Quality and Natural Resources [ENV, WI] (3.0 cr)
or FNRM 3114 - Hydrology and Watershed Management (3.0 cr)
- (taught at Cloquet Forestry Center)
- FNRM 2101 - Identifying Forest Plants (1.0 cr)
with FNRM 2102 - Northern Forests Field Ecology (2.0 cr)
with FNRM 2104 - Measuring Forest Resources (1.0 cr)

Additional Professional Courses

Select courses from the list below in consultation with a faculty adviser.

Take 6 or more credit(s) from the following:

- ANTH 3041 *{Inactive}*(3.0 cr)
- BBE 1002 - Biorenewable Resources [TS] (3.0 cr)
- ESPM 3021 *{Inactive}*[ENV] (3.0 cr)
- ESPM 3031 - Applied Global Positioning Systems for Geographic Information Systems (3.0 cr)
- ESPM 3101 *{Inactive}*(3.0 cr)
- ESPM 3202W - Environmental Conflict Management, Leadership, and Planning [WI] (3.0 cr)
- ESPM 3703 *{Inactive}*(3.0 cr)
- FNRM 3204 - Landscape Ecology and Management (3.0 cr)
- FNRM 3262 - Remote Sensing and Geospatial Analysis of Natural Resources and Environment (3.0 cr)
- FW 2001W - Introduction to Fisheries, Wildlife, and Conservation Biology [ENV, WI] (3.0 cr)
- FW 5603W - Habitats and Regulation of Wildlife [WI] (3.0 cr)
- GEOG 3371W - Cities, Citizens, and Communities [DSJ, WI] (3.0 cr)
- HORT 4021 *{Inactive}*(4.0 cr)
- LA 3501 - Environmental Design and Its Biological and Physical Context [ENV] (3.0 cr)
- MGMT 3001 - Fundamentals of Management (3.0 cr)
- WRIT 3266 *{Inactive}*[C/PE] (3.0 cr)
- SOC 1001 - Introduction to Sociology [SOCS, DSJ] (4.0 cr)
- SOC 3451W - Cities & Social Change [WI] (3.0 cr)
- SOIL 3416 - Plant Nutrients in the Environment (3.0 cr)



Program Sub-plans

A sub-plan is not required for this program.

Honors

This is an honors sub-plan.

CFANS students may participate in honors at both the freshman/sophomore level and the junior/senior level.

At the freshman/sophomore level, students participate in specially designed honors courses and honors colloquia focusing on current issues in their chosen field. Students complete three honors courses in their first two years; one must be an honors colloquium (CFAN 1000H). Completion of the freshman/sophomore honors program is recognized by a certificate and by designation on a student's transcript.

The heart of the junior/senior level honors program is an honors project supervised by a faculty mentor. Students also participate in other honors options designed to enhance their academic experiences. Graduation with honors is determined by GPA in the last 60 credits of A-F registration (including transfer coursework). Minimum GPAs are specified below.

Transcripts of students graduating with honors show one of the following:

Cum laude (minimum GPA: 3.50)

Magna cum laude (minimum GPA: 3.66)

Summa cum laude (minimum GPA: 3.75)

Students also receive recognition during commencement. To achieve the honors notation on their transcripts, students must be admitted to the junior/senior Honors Program, meet the GPAs stated above and complete all Honors Program requirements--which for most students comprises one semester of the Honors Colloquium, a second honors registration or approved Honors Option, and Honors Research. Admission to the Honors Program provides an opportunity for students to explore honors classes from other programs. The honors option offers students the flexibility to tailor a portion of the program to meet their unique needs and interests. Registration in honors courses requires admission to the Honors Program and college office approval.

Honors Focus

Honors (Freshman/Sophomore)

Freshman/sophomore honors students must complete at least one registration of CFAN 1000H and two additional honors courses by their 60th credit. Additional courses may be taken from CFAN 1000H, CFAN 3101H, or other University-wide honors coursework. Students may propose an honors "option" in place of one required honors registration.

CFAN 1000H *{Inactive}*(2.0 cr)

CFAN 3101H *{Inactive}*(2.0 cr)

or other honors designated coursework

-OR-

Honors (Junior/Senior)

Junior/senior honors students must complete one registration of CFAN 3101H. They must complete one additional registration in either CFAN 3101H or another University-wide honors class, or propose an honors "option" (this must be approved by the honors committee). Students must also complete CFAN 3100H. This faculty-mentored honors project is submitted to the honors committee for approval prior to registration.

CFAN 3101H *{Inactive}*(2.0 cr)

CFAN 3100H *{Inactive}*(2.0 - 3.0 cr)

an honors designated course

or approved honors "option"