Twin Cities Campus

Forest Ecosystem Management and Conservation Minor
Forest Resources

College of Food, Agricultural and Natural Resource Sciences

- Program Type: Undergraduate minor related to major
- Requirements for this program are current for Fall 2020
- Required credits in this minor: 18 to 19

The forest resources minor helps students in natural resources and other areas gain deeper understanding of the scientific foundations of forestry, the management of forest resources, and the importance of forest resources to society. Students select from an array of courses in forest assessment, forest biology and management, and forest economics and policy. Students may include a three-week, hands-on field session at the Cloquet Forestry Center as part of their minor. Students interested in the minor should contact the CFANS Student Services Office.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Minor Requirements
Core Courses
  FNRM 3104 - Forest Ecology (4.0 cr)
  FNRM 3411 - Managing Forest Ecosystems: Silviculture (3.0 cr)

Lab/Field Experiences
  Take 3 or more credits from the following:
  FNRM 1101 - Dendrology: Identifying Forest Trees and Shrubs (3.0 cr)
  or These classes take place in August at the Cloquet Forestry Stattion, Cloquet, MN. FNRM 2101 and 2104 are summer registration. FNRM 2102 is fall registration.
    FNRM 2101 - Identifying Forest Plants (1.0 cr)
    FNRM 2102 - Northern Forests Field Ecology (2.0 cr)
    FNRM 2104 - Measuring Forest Resources (1.0 cr)

Forest Policy, Management, and Planning
  Take 3 or more credits from the following:
  ESPM 3241W - Natural Resource and Environmental Policy [SOCS, CIV, WI] (3.0 cr)
  ESPM 3261 - Economics and Natural Resources Management [SOCS, ENV] (4.0 cr)
  FNRM 3471 - Forest Management Planning (3.0 cr)
  FNRM 4232W - Managing Recreational Lands [WI] (4.0 cr)

Additional Courses
  Take remaining credits to reach required total from the following two areas

Resource Assessment
  FNRM 3131 - Geographical Information Systems (GIS) for Natural Resources [TS] (4.0 cr)
  FNRM 3218 - Measuring and Modeling Forests (3.0 cr)
  FNRM 3262 - Remote Sensing and Geospatial Analysis of Natural Resources and Environment (3.0 cr)

Ecology and Management of Vegetation, Wildlife, Water and Soil Resources
  FNRM 3501 - Arboriculture: Selection and Maintenance of Trees (3.0 cr)
  FNRM 3114 - Hydrology and Watershed Management (3.0 cr)
  FNRM 3431 - Timber Harvesting and Road Planning (2.0 cr)
  FNRM 5413 - Managing Forest Ecosystems: Silviculture Lab (1.0 cr)
  FNRM 3203 - Forest Fire and Disturbance Ecology (3.0 cr)
  FNRM 3204 - Landscape Ecology and Management (3.0 cr)
  FNRM 3205 *{Inactive}*(3.0 cr)
  ENT 4251 - Forest and Shade Tree Entomology (3.0 cr)
  PLPA 3003 - Diseases of Forest and Shade Trees (3.0 cr)