

Forestry & Natural Resources Major Snapshot

Department of Environmental Science, Policy & Management

Conserving and restoring the earth's natural resources requires broad knowledge and experience. The Forestry and Natural Resources major offers concentrations in *Forestry & Natural Sciences* or *Human Dimensions of Natural Resources*. Students in the program, regardless of concentration, have ample opportunity to acquire interdisciplinary skills in the ecology, stewardship, and management of ecosystems such as forests, woodlands, and grasslands. Within the program, students can choose to emphasize such topics as wildlife biology, water policy, fire science, ecosystem restoration, environmental justice, remote sensing and GIS, and rural sociology.

A minor in Forestry is available for students who are interested in learning about forestry and renewable resource management as an adjunct to their chosen fields.

ESPM Student Affairs is located in 245 Mulford Hall. Academic Advisor Maire Lanigan and Intake Advisor Emilie Dandan are available to answer most of your questions about the major. For general advising questions, students are encouraged to drop in weekdays between 9:30 – 12:00 and 1:30 to 4:00. They may also contact advisors via e-mail (mlanigan@nature.berkeley.edu or ebdandan@nature.berkeley.edu) and by telephone at 510-642-7381.

Research Opportunities ♦ Honors Program ♦ Forestry, Wildlife Management, & Other Careers

Students with a GPA of 3.2 or higher may enroll in the College of Natural Resources Honors Program (H196) once they have reached upper division standing. To fulfill the program requirements, students design, conduct, and report on an individual research project working with a faculty sponsor. For more information, visit http://nature.berkeley.edu/site/honors_program.php.

In addition to the Berkeley campus Undergraduate Research Apprenticeship Program (URAP), CNR students can also apply for the CNR Sponsored Projects for Undergraduate Research (SPUR). Visit http://nature.berkeley.edu/site/undergraduate_research.php for details.

FNR graduates are well-prepared for graduate school and careers in environmental consulting, public agencies, non-profit conservation organizations, and private companies. Students also have the option of preparing for professional careers in forestry, wildlife, and range management. The FNR career snapshot is located at http://nature.berkeley.edu/site/planning_resources.php.

Getting a Degree

To earn a Bachelor of Science from U.C. Berkeley in Forestry & Natural Resources, students must fulfill unit and GPA requirements, university and campus requirements, college requirements, and major requirements. Please see the major advisor for more details about the major requirements.

Unit and GPA Requirements

In order to graduate, students must complete a total of 120 units, 36 of which must be upper division units. Students must have at least a 2.0 cumulative GPA, and a 2.0 GPA in the courses required for the major.

University and Campus Requirements

- Subject A
- American Cultures (if taken for a letter grade, this course may overlap with a Social & Behavioral Science course)
- American History & Institutions

College Requirements

- Two courses in Reading & Composition (8 units): R1A and R1B
- 15 upper division units must be in the College of Natural Resources (EEP, ES, ESPM, NST, PMB)

Forestry & Natural Resources Major Requirements

120 units

Lower Division Requirements for all FNR majors
<input type="checkbox"/> ESPM Environmental Science Core: 1 course from ESPM 2, 6, or C10 (L&S C30V)
<input type="checkbox"/> ESPM Social Science Core: 1 course from ESPM C11 (L&S C30U), ESPM C12, ESPM 50AC or 60
<input type="checkbox"/> Two courses in Reading & Composition (8 units): R1A and R1B (College Requirement)
<input type="checkbox"/> One course (3-4 units) in Social & Behavioral Sciences or International Studies chosen from the "Seven Breadth" listing: http://ls-advise.berkeley.edu/requirements/lsreq.html#7breadth
<input type="checkbox"/> One course (3-4 units) in Arts & Literature, Historical Studies, or Philosophy & Values chosen from the "Seven Breadth" listing: http://ls-advise.berkeley.edu/requirements/lsreq.html#7breadth .

Forestry & Natural Sciences (FNS) Concentration Lower Division Requirements	Human Dimensions of Natural Resources (HDNR) Concentration Lower Division Requirements
<input type="checkbox"/> <u>Chemistry (4 units)</u> : Chem 1A <input type="checkbox"/> <u>Biology (4 units)</u> : Biology 1B <input type="checkbox"/> <u>Mathematics (6-8 units)</u> : Math 16A-B or Math 1A- B <input type="checkbox"/> <u>Statistics (4 units)</u> : Stat 2 or 20 <input type="checkbox"/> <u>Geographic Information Systems (3 units)</u> : ESPM 72 <input type="checkbox"/> <u>Economics (4 units)</u> : EEP 1 (recc'd); Econ 1 or 2 <input type="checkbox"/> <u>Physical Science (4 units)</u> : EPS 50 or GEOG 1	<input type="checkbox"/> <u>Physical Science</u> : One course from Physical Sciences (see L&S "Seven Breadth" List) <input type="checkbox"/> <u>Biology (3-4 units)</u> : Biology 1B or 11 <input type="checkbox"/> <u>Mathematics (3-4 units)</u> : Math 16A, 1A, or 32 <input type="checkbox"/> <u>Statistics (4 units)</u> : Stat 2, 20, Poli Sci 3, or Soc 5 <input type="checkbox"/> <u>Geographic Information Systems (3 units)</u> : ESPM 72 <input type="checkbox"/> <u>Economics (3-4 units)</u> : EEP 1 (recommended), Econ 1 or 2, or UGBA 10

Upper Division Requirements for all FNR majors:
<p>8-week Forestry Field Program ("Summer Camp") in the northern Sierra Nevada (10 units). Recommended before junior year. Go to http://espm.berkeley.edu/summercamp/</p> <input type="checkbox"/> ESPM 101A: Sierra Nevada Ecology (4) <input type="checkbox"/> ESPM 101B: Silviculture (1) <input type="checkbox"/> ESPM 101C: Forest Measurements, Aerial Photography, & Surveying (2) <input type="checkbox"/> ESPM 101D: Timber Resource Utilization (1) <input type="checkbox"/> ESPM 101E: Forest Resource Management (2)
<p>OR: ESPM C107, Biology & Geomorphology of Tropical Islands, a 13-unit fall semester course on the Polynesian island of Moorea.</p>
<p>Core Courses:</p> <input type="checkbox"/> ESPM 102A: Terrestrial Resource Ecology (4) F <input type="checkbox"/> ESPM 102C: Resource Management (4) SP <input type="checkbox"/> ESPM 102B/L: Natural Resource Sampling (2/2) F <input type="checkbox"/> ESPM 102D: Resource & Environmental Policy (4) SP

Restricted Electives by Concentration (18-21 units):	
<p>FNS Restricted Electives (6 courses): The FNS Concentration has two specializations for the restricted elective requirement: Professional Forestry or Natural Sciences.</p> <p>PROFESSIONAL FORESTRY SPECIALIZATION: ESPM 108A, 134, 182, 183, and 185 plus one additional course from one of the following subject categories: PE or MM.</p> <p>NATURAL SCIENCES SPECIALIZATION: Two courses each from both the BET and the PE subject categories, plus one additional course from each of the following: MM and M.</p>	<p>HDNR Restricted Electives (6 courses): Select six courses from four subject categories, one from each category plus two from anywhere:</p> <p>(a) Biology, Ecology, & Taxonomy (BET) (b) Physical Environment (PE) (c) Monitoring & Measurement (MM) (d) Management (M)</p>

Forestry & Natural Resources Major Requirements

120 units

Subject Categories							
A. Biology, Ecology, & Taxonomy (BET)				B. Physical Environment (PE)			
ESPM C103	ESPM 111	ESPM 115B	ESPM 134	ESPM 120		ESPM 181B	
ESPM 106	ESPM 112	ESPM 116A	ESPM 135	ESPM 121		CEE 103	
ESPM 108A	ESPM 113	ESPM 116B	IB 102	ESPM C129		GEOG 140A	
ESPM 108B	ESPM 114	ESPM 116C	IB 102L	ESPM C130		GEOG 143	
ESPM 109				ESPM C180		GEOG 144	
				ESPM 181A			
C. Monitoring & Measurement (MM)				D. Management (M)			
ESPM 171				CYPLAN 112A	ESPM 165	ESPM 169	ESPM 186
ESPM 172				ESPM C104	ESPM 166	ESPM 182	ESPM 187
EPS C120				ESPM 153	ESPM 167	ESPM 183	ESPM 188
LAEP C188				ESPM 155	ESPM 168	ESPM 184	ESPM 189
ANTHRO 169B						ESPM 185	