Food Systems

The food systems minor, hosted by the Department of Environmental Science, Policy & Management (ESPM) at the College of Natural Resources (CNR), is an interdisciplinary program of study that explores the role of food within the environment and society. Drawing from diverse fields as far ranging as ecology, sociology, the humanities, nutrition, history, and economics, the food systems minor critically examines issues of contemporary food and agriculture from a whole-systems perspective.

Students take six courses, of which only one can overlap with their major. A required community engagement project during the junior or senior year allows students to bring together what they have learned in a real-world setting.

Students who complete the minor will gain a broad and interdisciplinary understanding of critical themes and concepts related to the social, political, economic, environmental, cultural, nutritional, and public health issues of contemporary food and agriculture systems both domestically and internationally.

General Guidelines

Courses must be taken for a letter grade unless the course is only offered on a Pass/No Pass basis. The student must achieve at least a C (2.0) average in the courses taken in satisfaction of a minor program.

The requirements of the minor include:

1. Two Core Courses

Choose two courses, from two different categories listed below, for a minimum of 6 units.

**Natural Sciences**

- ESPM 118 Agricultural Ecology [3]
- ESPM 120 Soil Characteristics [3]
- ESPM 177A Sustainable Water and Food Security [4]
- PLANTBI 180 Environmental Plant Biology [2]

**Social Sciences**

- GEOG 130 Food and the Environment [4]
- SOCIOL 169F Cultural Perspectives of Food [3]

2. Three Elective Courses

Choose three courses from the categories below. A minimum of one elective must be from the category not chosen for a core course. Core course options not taken to fulfill the core course requirement can be counted toward the elective requirement. Elective courses must add up to a minimum of 9 units.*

**Natural Sciences**

- ESPM 113 Insect Ecology [2]
- ESPM 117 Urban Garden Ecosystems [4]
- ESPM 118 Agricultural Ecology [3] **
- ESPM 120 Soil Characteristics [3] **
- ESPM 131 Soil Microbial Ecology [3]
- ESPM C148 Pesticide Chemistry and Toxicology [3]
- ESPM 158 Biodiversity Conservation in Working Landscapes [4]

**Social Sciences**

- PLANTBI 40 The (Secret) Life of Plants [3]
- PLANTBI 135 Physiology and Biochemistry of Plants [3]
- PLANTBI 170 Modern Applications of Plant Biotechnology [2]
- PLANTBI 180 Environmental Plant Biology [2] **

**Food and Community Health**

- NUSCTX 10 Introduction to Human Nutrition [3] (*)
- PB HLTH 196 Special Topics in Public Health [1-4] (Topic must be Global Nutrition***)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESPM/ NUSCTX C159</td>
<td>Human Diet</td>
<td>4</td>
</tr>
<tr>
<td>ESPM C167/ PB HLTH C160</td>
<td>Environmental Health and Development</td>
<td>4</td>
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<tr>
<td>NUSCTX 10</td>
<td>Introduction to Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUSCTX 103</td>
<td>Nutrient Function and Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>NUSCTX 104</td>
<td>Food, Culture, and the Environment</td>
<td>2</td>
</tr>
<tr>
<td>NUSCTX 108A</td>
<td>Introduction and Application of Food Science</td>
<td>3</td>
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<tr>
<td>NUSCTX 108B</td>
<td>Application of Food Science Laboratory</td>
<td>4</td>
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<tr>
<td>NUSCTX 135</td>
<td>Food Systems Organization and Management</td>
<td>4</td>
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<tr>
<td>NUSCTX C114/ ESPM C148</td>
<td>Pesticide Chemistry and Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>NUSCTX 160</td>
<td>Metabolic Bases of Human Health and Diseases</td>
<td>4</td>
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<tr>
<td>NUSCTX 166</td>
<td>Nutrition in the Community</td>
<td>3</td>
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<td>PB HLTH 112</td>
<td>Global Health: A Multidisciplinary Examination</td>
<td>4</td>
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<tr>
<td>PB HLTH 170</td>
<td>Drinking Water and Health</td>
<td>3</td>
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<tr>
<td>PB HLTH 196</td>
<td>Special Topics in Public Health (Topic Global Nutrition only*)</td>
<td>4</td>
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*Only one lower division class OR up to two units of relevant upper division DeCal credit can count toward the minor. DeCal classes must be approved by the minor adviser and are considered outside the three elective categories: therefore they do not satisfy the requirement of a minimum of one elective taken from the category not chosen for a core course. Students can petition to include other relevant classes, including graduate classes.

**Course is also a core course

***Only this course topic is eligible for the minor

Only one overlapping course (upper or lower division) between this minor and a major

### 3. Community Engagement Project

Two units (90 hours) of experiential learning

**Experiential Learning through Engagement in Food Systems**

Central to the goal of the minor is an experiential learning internship, to be taken during the student’s junior or senior year. During an entire semester (or longer if they choose), students will work with an organization focused on some aspect of food system change. A Community Engagement Faculty Coordinator will be responsible for identifying community engagement partner organizations, with support from the minor advisor. Students will receive credit for community engagement through enrollment in ESPM 194C (formerly ESPM 197). The course will be taken for two units, which is 90 hours of on-ground time, or an average of 6 hours per week for a semester.

Learn About Community Engagement in Food Systems (https://nature.berkeley.edu/food-systems-projects)