FOOD SCIENCE & HUMAN NUTRITION: HUMAN NUTRITION, PHD

Doctor of Philosophy in Food Science and Human Nutrition: Human Nutrition Concentration

On Campus: Master of Science in Food Science and Human Nutrition, students are required to select a concentration:

- Food Science (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-ms/food-science/)
- Human Nutrition (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-ms/human-nutrition/)

Online: The focus of the online Master of Science in Food Science and Human Nutrition (https://fshn.illinois.edu/online/) is Food Science. Students are not required to select a concentration.

Graduate Degree Programs in Food Science & Human Nutrition

Graduate Majors:

- Food Science & Human Nutrition, MS (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-ms/) (on campus & online)

  concentrations:
  - Food Science (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-ms/food-science/)
  - Human Nutrition (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-ms/human-nutrition/)
  - Food Science and Human Nutrition, MS – Professional Science Master’s (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-ms/professional-science-masters/)
  - Food Science and Human Nutrition, PhD (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-phd/)

  concentrations:
  - Food Science (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-phd/food-science/)
  - Human Nutrition (p. 1)

Joint Degree Program:

- Food Science & Human Nutrition, PhD and Master of Public Health, MPH (http://catalog.illinois.edu/graduate/aces_ahs/joint-degree/food-science-human-nutrition-phd-public-health-mph/)

Research Areas

In addition to receiving training in the general field of food science or human nutrition, students have the opportunity to conduct research in the following areas of specialization:

- Food processing, engineering, and biotechnology
- Food ingredients, properties, and interactions
- Food microstructures, micro-carriers, and nanotechnology
- Food chemistry
- Food microbiology and biomass conversion
- Food safety and security
- Sensory sciences
- Dietary quality and food and nutrition patterns for optimal health
- Nutrition and disease interactions, including cancer, metabolic disorders, and gastrointestinal health
- Nutrition across the life span
- Biochemical and molecular nutrition
- Clinical nutrition
- Community nutrition

For additional information go to fshn.illinois.edu/graduate (http://fshn.illinois.edu/graduate/).

The PSM involves rigorous scientific training in the area of food science and/or human nutrition; additionally, instruction is provided in applied business knowledge and skills. This program is designed for those who seek careers in a science-based setting with significant managerial and leadership responsibilities. For additional information go to psm.illinois.edu/prospectivestudents/programs/foodscience.htm (http://psm.illinois.edu/prospectivestudents/programs/foodscience.htm).

Admission

In addition to meeting the Graduate College admission requirements, a student planning to pursue a graduate degree in the department should have a baccalaureate degree in a recognized field of biological, physical, agricultural, or engineering science. Background deficiencies may be removed with graduate credit courses designed for this purpose. Graduate Record Examination (GRE) scores are required of all applicants, and those whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Minimum TOEFL and IELTS scores can be found at grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/). Students can be admitted to start in fall, spring, or summer semesters except for the PSM concentration, which admits fall semester only. For information on the role faculty have in the admissions process go to fshn.illinois.edu/graduate/applying (http://www.fshn.illinois.edu/graduate/applying/+).

Internship in Dietetics

The Department of Food Science and Human Nutrition offers a dietetic internship for master’s and doctoral students specializing in human nutrition. Completion of the degree and the internship qualifies the student to take the Academy of Nutrition and Dietetics registration examination administered by the Commission on Dietetic Registration. For information on our dietetic internship program please contact Ms. Jessica Madson (jamadson@illinois.edu).

Information listed in this catalog is current as of 06/2023
Online Program

A non-thesis Master of Science in Food Science program is offered via live, synchronous online sessions using distance education technology. The program ensures the same degree of excellence, and courses are instructed by the same faculty, as the on-campus non-thesis program. Courses are typically offered in the evening. For requirements and additional information, please contact Dr. Dawn Bohn at dbrehart@illinois.edu.

Graduate Teaching Experience

Teaching is neither a Graduate College nor a FSHN requirement. A limited number of teaching assistantships are available to FSHN graduate students. Students are selected to be Graduate Teaching Assistants by the Department Head in consultation with the course instructor.

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments; statutory waivers and tuition scholarships are accepted. Financial aid for non-PSM graduate students is available in the form of fellowships, teaching and research assistantships, and tuition and partial fee waivers. Qualified candidates are considered for financial support upon application. Additional information on financial aid for graduate students can be found at fshn.illinois.edu/graduate/financial-assistance/.

Doctor of Philosophy in Food Science and Human Nutrition: Human Nutrition Concentration

If a candidate has a master’s degree in a related area, a minimum of 64 graduate hours, including up to 38 graduate hours of thesis research, must be completed. In consultation with the adviser and advisory committee, the remainder of the 64 graduate hours required for the degree consists of courses selected from inside or outside the department that are appropriate for training in the student’s field of specialization. Upon completion of all necessary formal courses and special options, the student is required to take an oral preliminary examination. After passage of the preliminary examination, the student’s activities are primarily devoted to thesis research. Upon submission of the dissertation, the candidate is required to pass a final oral examination before a graduate faculty committee.

For additional details and requirements refer to the department’s graduate handbook (http://fshn.illinois.edu/graduate/student-handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Entering with approved M.S./M.A. degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Concentration-specific coursework selected in consultation with advisor</td>
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<tr>
<td>FSHN 599</td>
<td>Thesis Research (max applied toward degree)</td>
<td>0 to 16</td>
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<td>Total Hours in residence</td>
<td>64</td>
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Entering with approved B.S./B.A. degree

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<tr>
<td></td>
<td>Concentration-specific coursework selected in consultation with advisor</td>
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<tr>
<td>FSHN 599</td>
<td>Thesis Research (max applied toward degree)</td>
<td>0 to 70</td>
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<td></td>
<td>Total Hours</td>
<td>96</td>
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Other Requirements

<table>
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<th>Requirement</th>
<th>Description</th>
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<tbody>
<tr>
<td>Minimum 500-level Hours Required</td>
<td>Overall</td>
</tr>
<tr>
<td>Minimum Hours Required Within the 8 Unit</td>
<td></td>
</tr>
<tr>
<td>Additional courses may be required beyond the concentration minimum per Advisory Committee recommendation</td>
<td></td>
</tr>
<tr>
<td>Qualifying Exam Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Preliminary Exam Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Final Exam/Thesis Defense Required</td>
<td></td>
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<tr>
<td>Dissertation Deposit Required</td>
<td>Yes</td>
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<tr>
<td>Minimum GPA:</td>
<td>3.0</td>
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</table>

Total Hours for Concentration in Human Nutrition: 26

Electives:

To meet 26-27 hours minimum, of which at least 3 (thesis MS) or 6 (non-thesis MS) hours need to be graded courses at the 500-level.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MCB 450</td>
<td>Introductory Biochemistry (or higher)</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 420</td>
<td>Nutritional Aspects of Disease</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 426</td>
<td>Biochemical Nutrition I</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 427</td>
<td>Biochemical Nutrition II</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 465</td>
<td>Principles of Food Technology</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 593</td>
<td>Seminar in Foods and Nutrition</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
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<tr>
<td></td>
<td>Minimum 500-level Hours Required Within the 8 Unit</td>
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</tr>
<tr>
<td></td>
<td>Minimum Hours Required Within the 8 Unit</td>
<td>12</td>
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<tr>
<td></td>
<td>Overall</td>
<td>17-19</td>
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For additional details and requirements refer to the department’s graduate handbook (http://fshn.illinois.edu/graduate/student-handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).
FSHN 592  Graduate Internship Experience (Up to 2 hours count toward degree)  0-2
FSHN 598  Advanced Special Problems  1-8
or NUTR 593  Individual Topics in Nutrition
NUTR 511  Regulation of Metabolism  4
NUTR 550  Grantsmanship and Ethics  3
NUTR 590  Disciplinary Seminar (Up to 2 hours count toward degree)  0 to 2
ANSC 421  Minerals and Vitamins  3
ANSC 520  Protein and Energy Nutrition  3
ANSC 524  Nonruminant Nutrition Concepts  2

Doctor of Philosophy in Food Science and Human Nutrition: Human Nutrition Concentration

department head: Nicki Engeseth
associate head of graduate programs: Michael Miller
(mille216@illinois.edu)

overview of admissions & requirements: https://fshn.illinois.edu/graduate/apply

overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply

department website: https://fshn.illinois.edu/
program website: https://fshn.illinois.edu/graduate/program-overview

department faculty: https://fshn.illinois.edu/directory/faculty/
college website: https://aces.illinois.edu/

address: 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-4498
email: FSHNGradAdmissions@illinois.edu
(fshngradadmissions@illinois.edu)

Information listed in this catalog is current as of 06/2023