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

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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/human-nutrition
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)

For the Doctor of Philosophy 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-phd/food-science/)
  Human Nutrition (p. 1)

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).

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 (http://fshn.illinois.edu/graduate/financial-assistance/).

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 BS degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>FSHN 410</td>
<td>Introduction to Food Science and Nutrition</td>
<td>3</td>
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<tr>
<td>FSHN 420</td>
<td>Nutritional Aspects of Disease</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 430</td>
<td>Food Science Research</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 432</td>
<td>Advanced Clinical Nutrition</td>
<td>2</td>
</tr>
<tr>
<td>FSHN 440</td>
<td>Applied Statistical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 450</td>
<td>Basic Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 460</td>
<td>Advanced Clinical Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 480</td>
<td>Topics in Nutrition Research (Up to 4 hours)</td>
<td>1 to 3</td>
</tr>
<tr>
<td>FSHN 490</td>
<td>Dietetic Internship (Restricted to dietetics</td>
<td>5</td>
</tr>
<tr>
<td>FSHN 492</td>
<td>Graduate Internship Experience (Up to 2 hours</td>
<td>0 to 12</td>
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<tr>
<td>FSHN 498</td>
<td>Advanced Special Problems</td>
<td>1 to 8</td>
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<tr>
<td>or NUTR 50</td>
<td>Individual Topics in Nutrition</td>
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<tr>
<td>NUTR 511</td>
<td>Graduation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>NUTR 550</td>
<td>Grantsmanship and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 590</td>
<td>Disciplinary Seminar (Up to 2 hours)</td>
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</table>

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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.
ANSC 421  Minerals and Vitamins  3
ANSC 520  Protein and Energy Nutrition  3
ANSC 524  Nonruminant Nutrition Concepts  2

1 Undergraduate training must include statistics (ACE 261, CPSC 241, ECON 202, MATH 161, PSYC 235, SOC 280, or STAT 100), nutrition (equivalent to FSHN 220), and systemic physiology (equivalent to MCB 246). These undergraduate courses are not required for admission, but must be completed early in the graduate program and do not count toward concentration requirements. M.S. degrees require at least 12 hours of 500-level course work (including thesis research), and at least 8 of these 12 hours must be in the major field for graduation.

2 Additional courses may be required beyond the concentration minimum, per Advisory Committee recommendations, depending upon student/advisor learning objectives. A student whose prior education includes course work with identical or similar content to those specified above will be guided by their advisor and Advisory Committee regarding the selection of additional course work needed to meet the minimum hours of the HN concentration.

3 Students are encouraged to take new courses, rather than retake required courses they have already taken. If you have already taken a required course at the University of Illinois, it is highly recommended that you do not retake it. No petition is required. If you have taken a very similar course at another university, you are strongly encouraged to petition for acceptance of that course in lieu of the required course. Courses should be selected to expand and strengthen your knowledge in core and related disciplines, and/or to increase your research capabilities. Retaking a course does not meet that objective. For additional advice on this topic, contact your advisor and faculty advisory committee.

4 Students enrolled in the Graduate Dietetic Internship may count up to 5 hours of FSHN 590 or FSHN 591 towards 500-level course requirements.

5 Students are required to enroll in another seminar course if they have a conflict that precludes their enrollment in FSHN 597 or NUTR 500. The seminar course may be offered by another department.

6 Course selection is flexible beyond this list if decided in consultation with advisor/advisory committee.

7 Non-thesis M.S. students must complete the concentration requirements, including at least 6 hours of 500-level courses, and enroll in other courses to total at least 32 hours.

8 Up to 2 hours for thesis degrees; up to 6 hour for non-thesis M.S. degree.

### Entering with approved B.S./B.A. degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td></td>
<td>Concentration-specific coursework selected in consultation with advisor</td>
<td>26</td>
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<tr>
<td>FSHN 599</td>
<td>Thesis Research (max applied toward degree)</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>96</strong></td>
</tr>
</tbody>
</table>

### Other Requirements

- **Requirement**: Other requirements may overlap
- **Description**: Additional courses may be required beyond the concentration minimum per Advisory Committee recommendation
- **Qualifying Exam Required**: Yes
- **Preliminary Exam Required**: Yes
- **Final Exam/Thesis Defense Required**: Yes
- **Dissertation Deposit Required**: Yes
- **Minimum GPA**: 3.0

### 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>
<td>26</td>
</tr>
<tr>
<td>FSHN 599</td>
<td>Thesis Research (max applied toward degree)</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>64</strong></td>
</tr>
</tbody>
</table>

### Other Requirements

- **Requirement**: Other requirements may overlap
- **Description**: Additional courses may be required beyond the concentration minimum per Advisory Committee recommendation
- **Qualifying Exam Required**: Yes
- **Preliminary Exam Required**: Yes
- **Final Exam/Thesis Defense Required**: Yes
- **Dissertation Deposit Required**: Yes
- **Minimum GPA**: 3.0

1 For additional details and requirements refer to the department's program information online ([https://business.illinois.edu/accountancy/programs/phd/](https://business.illinois.edu/accountancy/programs/phd/)) and the Graduate College Handbook ([http://www.grad.illinois.edu/gradhandbook/](http://www.grad.illinois.edu/gradhandbook/)).