FOOD SCIENCE & HUMAN NUTRITION: HUMAN NUTRITION, PHD

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

The PhD Program in the Department of Food Science and Human Nutrition is a traditional on campus doctoral program. Students are required to have a research advisor and applicants are encouraged to contact department faculty (https://fshn.illinois.edu/directory/faculty/graduate-advising-faculty/) in their areas of interest to inquire about possible research and funding opportunities.

Research Areas for Human Nutrition Concentration
FSHN faculty address a wide-variety of research areas related to human nutrition. Clinical nutrition, community nutrition, nutritional biochemistry, nutrigenomics, and nutritional toxicology are the general areas of strength for the FSHN human nutrition faculty.

Students focusing on human nutrition will learn from interactions with faculty members whose laboratories focus on research in the following areas:

• pediatric nutrition
• geriatric nutrition
• effects of bioactive compounds naturally found in foods on chronic diseases
• energy metabolism
• epigenetics
• the functions of essential fatty acids
• the influence of diet on cancer development
• ingestive behavior
• molecular mechanisms of food ingredients in disease prevention
• molecular mechanisms of obesity and insulin resistance
• nutrition and exercise
• optimization of nutritional support through enteral and parenteral nutrition

Other research topics are related to nutrition education, dietetics, disease prevention and treatment, and general health and wellness practices.

For more information about our Graduate Degree Programs, please visit our website (https://fshn.illinois.edu/academics/graduate-degrees/).

Admission
In addition to meeting the Illinois 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.

Review all Food Science and Human Nutrition Admission requirements (https://fshn.illinois.edu/academics/graduate-degrees/) online.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 79 (iBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 6.5 overall. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/) are met. For those taking the TOEFL or IELTS, full admission status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for scores greater than 102 (TOEFL iBT), or 7.0 (IELTS). Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

The Human Nutrition MS and PhD is a STEM-designated program.

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).

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
Financial aid for graduate students is available in the form of fellowships (Fall admission only), teaching and research assistantships, and tuition and partial fee waivers. Qualified candidates are considered for financial support upon application. See additional information on financial aid (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-phd/human-nutrition/fshn.illinois.edu/graduate/financial-assistance/) for graduate students.

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Doctoral degrees require successful completion of a minimum of 96 semester hours of graduate credit. Doctoral degree students, regardless of transfer credits or a master’s degree completed elsewhere, must complete at least 64 hours of residence credit out of the total of 96 hours required for the doctoral degree. Thesis hours count toward residence credit. 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 advisor 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 (https://fshn.illinois.edu/academics/graduate-degrees/graduate-student-resources/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

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

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<th>Hours</th>
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<td>Concentration-specific coursework selected in consultation with advisor</td>
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<td>FSHN 599</td>
<td>Thesis Research (max applied toward degree)</td>
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### Entering with approved B.S./B.A. degree

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<tr>
<td>FSHN 599</td>
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### Other Requirements

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<td>Other requirements may overlap</td>
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<td>Minimum Hours Required Within the 8 Unit:</td>
<td>Minimum 500-level Hours Required Overall 12</td>
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<td>Additional courses may be required beyond the concentration minimum per Advisory Committee recommendation</td>
<td>Qualifying Exam Required Yes</td>
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<td>Preliminary Exam Required Yes</td>
<td>Final Exam/Thesis Defense Required Yes</td>
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<td>Dissertation Deposit Required Yes</td>
<td>Minimum GPA: 3.0</td>
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<td><strong>Total Hours for Concentration in Human Nutrition</strong></td>
<td>26</td>
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#### Required Courses:

- MCB 450 Introductory Biochemistry (or higher) 3
- FSHN 420 Nutritional Aspects of Disease 3
- FSHN 426 Biochemical Nutrition I 3
- FSHN 427 Biochemical Nutrition II 3
- FSHN 465 Principles of Food Technology 3
- FSHN 593 Seminar in Foods and Nutrition 2

#### 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.

- FSHN 421 Pediatric Clinical Nutrition 3