

Concentration in Food Science (26-27 hours minimum)^{1, 2, 3}

Required courses (17-18 hours)

- FSHN 595 (3 H) – Nutrition for Food Scientists
- FSHN 461 (4 H) – Food Processing I
- FSHN 462 (2 H) – Food Processing II
- FSHN 595 (3 H) – Advanced Food Chemistry
- FSHN 573 (3 H) – Advanced Food Microbiology
- FSHN 597 **or** NUTR 500 (required every semester for 0 H; 1 H when defending dissertation) Seminar in Food Science or Nutritional Sciences Seminar, respectively⁴
- FSHN 593 **or** FSHN 596 (2 H) - Seminar in Foods or Seminar in Nutrition, respectively

Electives⁵

Food Processing and Engineering

- FSHN 460 (3 H) – Food Processing Engineering
- ABE 498 (3 H) – Engineering Application of Nano-scale Biology
- FSHN 595 (2 H) – Advanced Food Processing
- FSHN 595 (2 H) – Advanced Food Proteins – Structure/Function Relationships
- FSHN 595 (1 H) – Measurement Technologies for Food & Biological Materials

Food Chemistry

- FSHN 416 (3 H) – Food Chemistry Laboratory
- FSHN 517 (2 H) – Fermented and Distilled Beverages
- FSHN 518 (3 H) – Chemistry of Lipids in Foods
- FSHN 595 (3 H) – Food Proteins and Enzymology
- FSHN 595 (4 H) – Flavor Chemistry and Analysis
- FSHN 595 (4 H) – Water Relations in Foods
- FSHN 595 (2 H) – Advanced Food Protein Techniques/ Chemistry

Food Microbiology

- FSHN 472 (2 H) – Sanitation in Food Processing
- FSHN 575 (3 H) – Issues in Food Safety

Others (of interest to many)

- FSHN 595 (3 H) – Advanced Topics in Sensory Science
- FSHN 440 (4 H) - Applied Statistical Methods I
- CPSC 540 (5 H) – Applied Statistical Methods II
- CPSC 541 (5 H) – Regression Analysis
- NUTR 550 (2 H) – Grantsmanship and Ethics
- FSHN 592 (up to 2 H) - Graduate Internship Experience
- FSHN 598 **or** NUTR 593 - Advanced Special Problems or Individual Topics in Nutrition, respectively⁶

¹Undergraduate training must include statistics (ACE 261, CPSC 241, ECON 202, MATH 161, PSYC 235, SOC 280, or STAT 100) and basic science courses relevant to the student's chosen focus (including for example, biochemistry, physical chemistry, microbiology, or material science). These undergraduate courses are not required for admission, but must be completed early in the graduate program and do not count toward concentration requirements. Both M.S. and Ph.D. 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.

²Additional 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 FS concentration.

³Students 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.

⁴Students 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.

⁵Non-thesis M.S. degree students must complete the concentration requirements, including select at least 3 hours of 500-level elective and other courses to equal a total of at least 32 hours.

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

The Graduate College requires at least 32 hours for an M.S. degree and 96 hours for a Ph.D. degree. Beyond concentration requirements, thesis research (FSHN 599) and non-concentration 400- and 500-level course work are used to meet the balance of hours required for graduate degree.