The School of Food and Agriculture provides students with the opportunity to obtain an M.S. degree in Food Science and Human Nutrition, and a Ph.D. in Food and Nutrition Sciences. Faculty research programs include nutrition behavior change, obesity prevention, berry bioactives and their role in disease prevention and amelioration, food processing and preservation, food safety and quality, seafood quality, sensory evaluation, and product development.

The M.S. in Food Science and Human Nutrition has a thesis and non-thesis option. M.S. Applicants in with a Food Science focus must have successfully completed undergraduate training with either a major or minor in one of the biological or physical sciences with courses in organic chemistry and biochemistry or an undergraduate degree in food science, food technology, food engineering or processing. Applicants with a Human Nutrition focus should have an undergraduate degree in nutrition (or approved by the Academy of Nutrition and Dietetics), human ecology, chemistry, biochemistry, or in an appropriate combination of biological sciences with courses in nutrition, organic chemistry, biochemistry, and human physiology.

The M.S. in Food Science and Human Nutrition features two sub-plans.

1. M.S. combined with a Dietetic Internship. This sub-plan is only available to students who have obtained a verification statement from an Accreditation Council for Education in Nutrition and Dietetics (ACEND) accredited undergraduate program and who have matched into the University of Maine Dietetic Internship Program.

2. UMaine Online Combined Human Nutrition and Food Technology. This sub-plan is completely delivered through UMaine Online and has only a non-thesis option. Students in this sub-plan are not eligible for assistantships or fellowships and cannot apply to the doctoral program upon completion of the online M.S. Applicants selecting the combined Human Nutrition and Food Technology UMaineOnline program should have had one year of college-level chemistry, one year of college-level biology (with one semester being Anatomy & Physiology), and an entry-level nutrition course.

The Master of Science in Food Science and Human Nutrition (thesis) requires: 30 credit hour minimum, typically taking two years to complete

- 12 credit hours of FSN formal coursework minimum (see list of applicable courses below), with no more than 4 credits at the 400 level, exclusive of seminars and special problems courses.

FSN 501 Advanced Human Nutrition; FSN 502 Food Preservation; FSN 506 Nutritional Assessment; FSN 508 Nutrition & Aging; FSN 510 Trace Mineral Nutrition, Metabolism, and Clinical Applications; FSN 512 Current Food Safety Systems; FSN 517 Food Safety and Quality Control; FSN 520 Food Product Development; FSN 524 Responsible Design, Conduct and Analysis of Research; FSN 528 Food Microbiology; FSN 529 Food Microbiology Laboratory; FSN 530 Integrative and Functional Nutrition; FSN 538 Fermented Foods and Probiotics; FSN 540 Advanced Clinical Topics; FSN 545 Utilization of Aquatic Food Resources; FSN 555 Organic and Natural Foods; FSN 565 Type 2 Diabetes, Obesity and Food; FSN 580 Food Chemistry; FSN 584 Lipids, Diet and Cardiovascular Disease; FSN 585 Sensory Evaluation I; FSN 586 Sensory Evaluation II; FSN 587 Food Analysis; FSN 603 Nutrients in the Food System; or SFA 551 Infectious Diseases and Food Safety- From Plants to Humans.
• 2 credit hours graduate seminar, FSN 571 and FSN 671
• 3-4 credits of statistics at the 400 or higher level
• one approved Responsible Conduct of Research course (see list below)
  o FSN 524 - Responsible Design, Conduct and Analysis of Research (3 credits) (may also be used to fulfill the statistics requirement)
  o INT 601 - Responsible Conduct of Research (1 credit)
  o BIO 505 - Professionalism in Biology (2 credits)
  o CMJ 600 - Introduction to Graduate Study in Communication (2 credits)
  o PSY 603 - Ethics and Professional Problems (3 credits)
  o SFR 521 - Research Methods (3 credits)
  o SMS 691 - Marine Science Seminar (1 credit)
• no more than 6 credits as FSN 581, Problems in Food Science & Human Nutrition
• minimum GPA of 3.0 for graduation

The Master of Science in Food Science and Human Nutrition (non-thesis) requires:
• 30 credit hour minimum, typically taking two years to complete
• 15 credit hours of FSN formal coursework minimum, with no more than 4 credits at the 400 level, exclusive of seminars and special problems
• 2 credit hours graduate seminar, FSN 571 and FSN 671
• 3-4 credits of statistics at the 400 or higher level
• 3 credits of FSN 695 Food Science and Human Nutrition Practicum
• Minimum GPA of 3.0 for graduation

Master of Science in Food Science and Human Nutrition combined with a Dietetic Internship, thesis or non-thesis, has the same requirements as those listed above except for:
• 34 credit hour minimum, typically taking two years to complete
• FSN 650 Dietetic Internship Orientation and Application I, FSN 651 Dietetic Internship Orientation and Application II, FSN 652 Dietetic Internship Evaluation, and FSN 681 Dietetic Supervised Practice
• 12 -15 credit hours of FSN formal coursework minimum including FSN 506 Nutritional Assessment and FSN 540 Advanced Clinical Topics, with no more than 4 credits at the 400 level, exclusive of seminars and special problems courses
• 3-4 credits of statistics at the 400 or higher level
• 21-month continuous enrollment to complete FSN 650, 651, 652, and 681. FSN 681 is completed as 1 credit in the summer and 5 credits in the fall or spring, depending upon an individual student’s program.

The Master of Science in Food Science and Human Nutrition: Combined Human Nutrition and Food Technology online requires:

• 30 credit hour minimum, typically taking two years to complete

• 27 credit hours of FSN formal coursework minimum including FSN 501 Advanced Human Nutrition, FSN 502 Food Preservation, and FSN 524 Responsible Design, Conduct and Analysis of Research. All course selections must be approved UMaine Online FSN graduate courses

• A minimum of 3.0 GPA to graduate