MS in Food Science

Degree Requirements

- Minimum of 30 hours of graduate-level coursework.
- 15 hours must be at the 8000-level or above.
- Maximum of 40% of coursework can be F_S 8090 or F_S 8085 hours.

While a basic goal of the M.S. program is to provide students with specialized skills and training in research methods, the Food Science graduate faculty (including faculty from Food Science, Hospitality Management, and Agricultural Systems Management) believe that it is important for M.S. students to understand something of the breadth of the discipline as well.

There are three tracks in the Food Science M.S. program: Food Science, Hospitality Management and Agricultural Systems Management. Each track includes specific required courses.

Food Science Track Required Courses:

- **Chemistry and Analysis**
  - F_S 7310 Food Chemistry and Analysis (4)
  - F_S 7311 Investigation of Food Properties
  - F_S 7315 Food Chemistry and Analysis Laboratory

- **Engineering/Processing**
  - F_S 7330 Principles of Food Processing (4)
  - or BIOL_EN 7160 Food Process Engineering

- **Microbiology**
  - F_S 7370 Food Microbiology (3)
  - F_S 7375 Food Microbiology Laboratory (2)

- **Hospitality Management Track Required Courses (pick 4):**
  - HSP_MGMT 7100 Hospitality Human Resources Management (3)
  - HSP_MGMT 7110 Hospitality Sales and Marketing (3)
  - HSP_MGMT 7180 Strategic Management in the Hospitality Industry (3)
  - HSP_MGMT 7200 Destination Management (3)
  - HSP_MGMT 7400 Hospitality Finance Management (3)

- **Agricultural Systems Management Track Required Courses (pick 4):**
  - AG_S_M 7020 Agricultural Safety and Health (3)
  - AG_S_M 7220 Material Handling and Conditioning (3)
  - AG_S_M 7320 Agricultural Equipment and Machinery (3)
  - AG_S_M 7390 Optimization and Management of Food and Agriculture Systems (3)
  - AG_S_M 7420 Surface Water Management (3)
  - or AG_S_M 7460 Irrigation and Drainage

Sample Plan of Study

The student and the major advisor, in consultation with the M.S. Program Committee will prepare a plan of study. The plan of study includes a list of the formal courses, readings, problems, research hours and seminars that the students will use to fulfill the requirements for the M.S. degree.

Minimum Requirements

- F_S 8402 Research Methods in Food Science (2)

Thesis Requirements

A Masters Degree Program Committee must be identified prior to approval of the research topic for the M.S. thesis and no later than the end of the second semester. An acceptable M.S. Program Committee must include at least three graduate faculty members, at least two of whom must be from the Food Science program, including the advisor chair. At least one committee member must be a graduate faculty member from MU, but outside of the Food Science Program.

The defense for the M.S. degree program will include the following components:

1. Exit seminar presented to the M.S. graduate program committee and the public.
2. Oral examination to demonstrate mastery of the course of study.

In addition to the departmental requirements, the MU Office of Graduate Studies is requiring that all graduating students include a public abstract. The public abstract will be used by the MU Office of Graduate Studies to record and track graduate students' research interests.

Exit Seminar

Immediately before the final examination, the M.S. student must present a seminar on his or her research. The seminar must take place when MU is officially in session and has to be announced at least two weeks prior to the scheduled date. The exit seminar is open to the general university audience. All members of the M.S. Program Committee will attend.

Final Examination

After the student's exit seminar has been presented, the M.S. Program Committee will conduct a final oral examination. The candidate should be prepared to defend his/her research and discuss any related areas.

A report of the examination, carrying the signatures of at least three members of the committee, must be sent to the MU Office of Graduate Studies before the deadline preceding the anticipated date of graduation. For the thesis to be considered successfully defended, the student’s M.S. Program Committee must vote to pass the student on the defense with no more than one dissenting or abstaining vote.

All exit seminars are open to the general faculty. The Food Science program will announce exit seminars to appropriate colleagues within and outside the program. The final examination must take place when MU is officially in session and the candidate must be enrolled at MU at the time of the examination.

A final copy of the thesis must be submitted to the MU Office of Graduate Studies electronically. A final bound copy of the thesis and at least one manuscript suitable for publication must be submitted to the department.

Admissions

Applicants are required to meet two sets of minimum qualifications for admission: the requirements of the MS in Food Science program (http://gradstudies.missouri.edu/academics/programs/food-science/master-of-science-in-food-science.php) and the minimum requirements of the Office of Graduate Studies (http://gradstudies.missouri.edu/admissions/).
eligibility-process/minimum-requirements). Because requirements vary, you must refer to a degree program's graduate admission page to learn about specific admission criteria, application deadlines, eligibility and application process. Your application materials will be reviewed by both the Office of Graduate Studies and the degree program to which you've applied before official admission to the University of Missouri.