IN OUR GRIT **N** **OUR GLORY.**

Graduate Handbook

Department of Food Science and Technology

UNIVERSITY OF Nebraska. Lincoln

Contents

The purpose of this handbook is to provide a summary of policies and procedures relevant to studies in the Food Science and Technology graduate program and for successful completion of an advanced degree. All graduate students should refer to this handbook as a reference. However, this handbook is not a replacement for the UNL Graduate Studies Catalog, which contains current information on graduate program requirements, thesis guidelines, and deadlines. The information in this handbook and other University catalogs, publications, or announcements is subject to change without notice.

From the UNL Office of Graduate Studies Graduate and Professional Catalog: "It is the responsibility of the student to be familiar with the information in the UNL Graduate Catalog and on the Graduate Studies website, and to know and observe all regulations and procedures relating to the program he or she is pursuing. In no case will a regulation be waived or an exception granted because a student pleads ignorance of, or contends that he or she was not informed of, the regulations or procedures. A student planning to graduate should be familiar with the dates relating to application for graduation and other pertinent deadlines.

The University of Nebraska-Lincoln expressly reserves the right to: add or delete courses from its offerings and to change times or locations; change academic calendars without notice; cancel any course for insufficient registrations; modify, consolidate, or delete any program; and revise or change rules, charges, fees, schedules, courses, requirements for degrees, and any other regulation affecting students including, but not limited to, evaluation standards, whenever considered necessary or desirable."

Contacts and Communication

Departmental Contacts

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MS Teams

A team account in Microsoft Teams has been created for current Food Science and Technology students to connect, collaborate and share tips and ideas. Online meetings may be set up with the Graduate Program Coordinator, Mrs. Julie McManamey through Teams.

Huskers Email Account

Students receive a new e-mail account (huskers.unl.edu) when they enroll. In May 2019, the University of Nebraska-Lincoln made it mandatory that all university correspondence go to a student's Huskers email account. Students are reponsible for checking their huskers.unl.edu account regularly.

Graduate Forms

Department of Food Science and Technology
- FDST Graduate Program Website
- MS Teams

Office of Graduate Studies
- Master's Degree Milestones, Requirements, Forms and Deadlines:
  https://www.unl.edu/gradstudies/academics/degrees/masters
- Doctoral Degree Milestones, Requirements, Forms and Deadlines:
  https://www.unl.edu/gradstudies/academics/degrees/doctoral

Application for Admission
- Go to the Application section of this handbook or see Office of Graduate Studies

Department Introduction

As a graduate student in our program, you will work closely with internationally recognized faculty. Our research areas are dedicated to solving real problems within the food system, from harvest to food processing to consumption to individual health. We invite you to work alongside faculty conducting research on food allergens, bioinformatics, biotechnology, food chemistry, food engineering, human health, food microbiology, food processing, food safety, and risk analysis.

Food Science and Technology faculty are located in the Food Innovation Center on Nebraska Innovation Campus (NIC). The Food Innovation Center includes state-of-the-art classrooms, teaching labs, wet/dry lab research space, clinical facilities, a sensory lab, and pilot plants.

The Food Science and Technology graduate program is flexible, allowing you to tailor your curriculum to meet your individual interests and goals. Program alumni now hold positions in industry, at academic institutions, and within government agencies.

Vision Statement
To be a global leader in advancing transdisciplinary approaches for safe, sustainable, and healthy foods through innovative research, teaching and outreach.

Mission Statement
- To provide high-quality education and training to individuals preparing for careers in food science and technology in the food industry, academia, or government.
- To conduct basic and applied research in food science and technology for the ultimate benefit of the food industry and consumers.
- To provide assistance to the food industry through extension programs of the Department.

Areas of Research
Our primary areas of research include:
- Food Allergens
- Food Safety
- Food Preservation and Transformation
- Biocomputing and Data Science
- Diet, Microbiome, and Host Interactions in Human Health
- Dietary Bioactive Agents and Functional Foods

Service and Research Centers
- [The Food Processing Center](#) (including the UNL Dairy Store)
- [Food Allergy Research and Resource Program](#)
- [Nebraska Food for Health Center](#)
- [Nebraska Gnotobiotic Mouse Program](#)

Degree Programs and Certificate Options

Degree Programs
We offer interdisciplinary programs leading to both masters and doctoral degrees. Students take courses and conduct research with faculty members located on the University of Nebraska-Lincoln's Nebraska Innovation Campus.

1. Master of Science Degree (M.S.) in Food Science and Technology
   A. Thesis (requires 30 credit hours)
   B. Project (requires 30 credit hours)

2. Doctoral Degree (Ph.D.) in Food Science and Technology
   A. Dissertation (requires 90 credit hours)

Certificate Options
1. Food Safety and Defense Graduate Certificate (online only, requires 12 hours)
   (Part of the Great Plains Interactive Distance Education Alliance, in cooperation with University of Nebraska-Lincoln, Kansas State University, and the University of Missouri)

Annual Progress Report/ Supervisory Committee Meeting Requirement

The faculty advisor or supervisory committee may call a meeting to review a student's performance at any time with a two-week notice.

All Food Science and Technology graduate students are required to complete a Student Progress Report form and meet with their supervisory committee at least once a year to review progress and discuss future research/projects and academic plans. The Student Progress Report is cumulative and should reflect a student's *entire* graduate experience (i.e., each Student Progress Report should build on the prior years' reports).

In addition to reviewing and discussing the Student Progress Report at the annual meeting, students should work with their faculty advisors to determine if additional elements for the meeting are needed, such as the student providing an oral presentation. The annual committee meeting may coincide with paperwork for establishing the supervisory committee and program of study as well as with the mid-program project proposal defense.

Students must email their completed Student Progress Report to their supervisory committee members and the FDST Graduate Coordinator at least two weeks prior to the meeting.

If a student fails to submit a Student Progress Report, then the student may receive an "Unsatisfactory" rating and be placed on probation.

Review Process
On Student Progress Report, the student will present a summary of his/her past academic and research accomplishments and plans for the future. Supervisory committee members vote and provide feedback if a student's performance is:

1. Satisfactory
   Meets expectations, has made progress, earned minimum grade requirements, clearly presented their research and a plan for future work towards degree completion.

2. Needs Improvement
Meets some expectations but has deficiencies in certain areas (i.e., not meeting deadlines, insufficient reading of the literature, less than adequate writing skills, no clear plan for the future).

If a student receives a "Needs Improvement" rating, then deficiencies will be discussed and suggestions to overcome those deficiencies will be proposed. The deficiencies and corrective steps will be documented on the Student Progress Report form.

3. Unsatisfactory
Does not meet expectations. In addition to the Needs Improvement deficiencies above, the student does not spend enough time in the lab, is not synthesizing research concepts, does not use proper controls, and cannot make conclusions from research results. Failure to meet with the supervisory committee once per year may also result in an in "Unsatisfactory" rating.

If a student receives "Unsatisfactory" rating, then the student will be placed on probation and a written six-month improvement plan must be submitted to the FDST Graduate Committee within two weeks. After submitting the improvement plan, the student will provide a written progress report 3 months later and hold a supervisory committee meeting 6 months later.

At the six-month supervisory committee meeting, all supervisory committee members must determine if the student has completed the plan and is making satisfactory progress. If the student fails to achieve satisfactory status, then the student will be terminated from the graduate program.

A written letter or memo must be submitted to the FDST Graduate Committee to report any change in status.

Course Requirements

FDST 90-954 Graduate Student Orientation
Offered every fall and spring semester – Class meets in-person; meeting via web conferencing is only with instructor permission.

Catalog Course Description
Introduction to the Department of Food Science and Technology, Food Innovation Center, university services, career paths and community building with fellow students.

ENGL 887 GESL and/or Academic Research Skills for International Students
This is an Office of Graduate Studies requirement. ENGL 887 is an advanced tutorial in academic writing for international graduate students. International graduate students are automatically enrolled in ENGL 887 GESL and/or Academic Research Skills for International Students their first semester if their English Proficiency Exam Writing Scores do not meet the minimum requirements.

ENGL 887 GESL and/or Academic Research Skills does *not* count toward the student's Plan of Study.

TOEFL iBT	Writing score below 25 or total below 100
IELTS	Writing score below 7.0 or total below 7.0
Duolingo	Production and literacy scores below 130

Professional Development Courses
Graduate education is more than just taking courses, meeting milestones, and doing research for a thesis or dissertation or preparing a project. Three important components of graduate education include:

1. Learning about the interdisciplinary nature of food science and technology and reflecting on broader impacts
2. Communicating complex scientific concepts and findings to a variety of audiences
3. Contributing to educational endeavors and teaching others

The following include the minimum credit hours required for a graduate student's Plan of Study. Graduate students are encouraged to attend the Fall Department of Food Science and Technology Seminar series and participate in the Spring Food Science and Technology Research Symposium even if they are not enrolled in the course.

FDST 951 Advanced Food Science and Technology Seminar

Offered every fall semester – Class meets in-person; meeting via web conferencing is only with instructor permission.

To count on a graduate student's Plan of Study, students must earn a letter grade of B or better.

Doctoral Degree	Minimum of 3 hours if admitted with a master's degree
	Minimum of 4 hours if admitted with a bachelor's degree
Master's Degree with Thesis	Minimum of 1 hour
Master's Degree with Project	Minimum of 1 hour

Catalog Course Description
Advanced study and discussion of scientific research pertaining to food science and technology.

Learning Outcomes
The purpose of this course is to immerse students in the interdisciplinary nature of food science and technology by joining the scholars in their field. Students will learn about and discuss new research discoveries and current research methods. Students will be evaluated through a written self-reflection journal what they learned from the seminar and how that new knowledge influences their own research. Students will also be expected to write about the potential broader impacts of the work presented in the seminar.

Invited seminar speakers from within and outside UNL will be hosted each week, providing students with opportunities to network and interact with fellow scholars. Hosting speakers with a variety of backgrounds will provide students with opportunities to learn about career opportunities and potential employers.

FDST 952 Professional Food Science Communication

Offered every spring semester – Class meets in-person; meeting via web conferencing is only with instructor permission.

To count on a graduate student's Plan of Study, students must earn a letter grade of B or better.

Doctoral Degree	Minimum of 3 hours if admitted with a master's degree
	Minimum of 4 hours if admitted with a bachelor's degree
Master's Degree with Thesis	Minimum of 1 hour
Master's Degree with Project	Minimum of 1 hour

Catalog Course Description
Best practices for science communication through practical delivery of food science and technology knowledge to a variety of audiences.

Learning Outcomes
Effective science communication helps advance society's understanding of what scientists do, how they make discoveries, and why those discoveries are important. The purpose of this course is for students to become competent communicators of complex scientific concepts and findings related to their project, thesis or dissertation. Students will be evaluated through an oral and visual presentation given at a one-day public Food Science and Technology Research Symposium.

FDST 896-002 Teaching Assistant Experience

Offered every fall and spring semester

To count on a graduate student's Plan of Study, students must earn a passing (P) grade.

Doctoral Degree	Minimum of 2 hours
Master's Degree with Thesis	Minimum of 1 hour
Master's Degree with Project	Not required

Oversight Committee
The FDST Graduate Committee in conjunction with the Teaching Lab Manager and Department Head will:
- Consider faculty and student teaching assistant requests
- Assign teaching assistant experiences
- Meet as needed to address other issues that arise regarding TA experiences

Catalog Course Description
A structured training experience in the professional skills used by teaching and learning assistants in food science and technology laboratories, recitations and lectures; assist in the instruction of food science and technology concepts.

Teaching assistants are an integral part of teaching food science and technology concepts within the UNL Department of Food Science and Technology. Teaching assistant experiences are invaluable for learning how to interact with people in meaningful ways and when confronted with difficult situations. Graduate students should consider this experience as a way to improve their teaching and communication skills and as their contribution to the educational endeavors of the Department. Being a teaching assistant is also a time to shadow and network with faculty as well as develop teaching skills.

Expectations
- A teaching experience must be associated with a course taught in the Department of Food Science and Technology.
- Teaching assistants are expected to be on campus one week before classes begins through one week after final exams to participate in orientations, teaching preparations, and to assist with final exam grading.
- Commit an average of 10 hours per week to the assigned teaching assistant experience.
  - The actual number of required hours per week may vary throughout the semester.
- Specific responsibilities vary depending upon the course and the instructor.
  - Teaching assistants are required to attend weekly preparatory meetings scheduled by the instructor and teaching lab manager; prepare laboratory media and course materials, including setting up and cleaning up labs; grade papers, proctor exams; assist students with laboratory or lecture exercises; answer students' questions; and/or prepare and deliver lectures or lab presentations.

Requirements
- Submit Teaching Assistant Experience Request form
  - We do our best to match TA assignments based on student preferences; however, the TA assignments are based primarily on course and instructor needs.
- Once assigned a position, a permission code is sent to the student so they can enroll in FDST 896-002
- Attend teaching assistantship orientation
- Complete all required training, such as classroom safety training and classroom instruction
- Complete an agreement of duties with instructor(s) and Teaching Lab Manager at the beginning of the Teaching Assistant Experience
- Submit Teaching Assistant Completion Form
  - At the end of the semester, teaching assistants must schedule an appointment with their instructor supervisor and Lab Manager to complete an evaluation

Consideration for Full-Time (1.0 FTE) Employees
Graduate students who are full-time employees should work with their faculty advisor and the FDST Graduate Committee Chair to identify how their expertise could complement one of our FDST courses. Teaching experiences for full-time employees may include developing and presenting laboratories or developing and presenting course materials for web conference or online delivery.

Course Conflicts and Requesting Exceptions for FDST Required Courses
A student who is unable to meet the minimum course requirements for FDST 951, FDST 952 or FDST 896-002 may, after receiving approval from their supervisory committee, make an email request to the Grad Chair (and Coordinator) with justification/ documentation for a waiver or course substitution when they submit their Plan of Study to the Food Science and Technology Graduate Committee. The Graduate Committee must review and approve all such waivers/substitutions prior to submitting the Plan of Study to the Office of Graduate Studies.

Minimum Grade Requirements
The following minimum grades are required to earn credit in graduate-level courses:

	Courses in the major department or area applied toward a degree (for example, FDST)	All other courses applied toward a degree or a graduate certificate
800-level with 400 or lower counterpart	B	C or P (pass)
900-level and 800-level without 400 or lower counterpart	C or P (pass)	C or P (pass)

The comprehensive exam for the minor may be waived if all grades in the minor are at least a B or P (pass).

Courses taken to fulfill requirements for a graduate certificate and later applied toward a graduate degree must meet the minimum grade requirements for the degree, which may be higher.

Grades below the minimum requirement cannot be applied toward a degree or graduate certificate. Students failing to receive a minimum acceptable grade may not continue their program of studies without permission of their supervisory committee or the departmental graduate committee.

Grading System and Grade Appeals Process

Master of Science Degree with Thesis Requirements

Master of Science Degree, Option A, consists of original research that contributes to new knowledge. It is designed to prepare students for careers in research and industry. MS Option A students go on to doctoral degree programs or are hired into scientist, technologist, or research and development positions in industry, laboratories and government agency.

Master of Science Degree, Option A, requires a thesis. It requires graduate assistantship funding offered by a faculty member within the Department of Food Science and Technology or another organization's funding (e.g. government fellowships, employer sponsorship, etc.), other than personal funds.

Length of Program
- If enrolled full-time, students typically complete the Master of Science Thesis in 2-2 ½ years.
- Students must complete their Master of Science degree within 5 consecutive years from their first term of admission.

Supervisory Committee
A student's supervisory committee should be formed by the end of the student's 2nd semester (or before completion of 15 credit hours).

Requirements
- Minimum of three committee members
- Faculty advisor serves as chair
- At least two committee members must be Food Science and Technology faculty. The third member may be from Food Science and Technology or another department.

Minor: Students seeking a minor are required to have a graduate faculty member from the minor program on their Supervisory Committee. It is at the discretion of the minor faculty advisor as to whether they elect to be on the student's supervisory committee as long as a minor comprehensive exam is not required.

UNL Full-time Employees
To reduce conflict of interest, University of Nebraska-Lincoln full-time (1.0 FTE) employees must identify a faculty advisor other than their immediate work supervisor. Their work supervisor may serve on their supervisory committee as a member.

Plan of Study (Memorandum of Courses)

A Plan of Study consists of courses considered necessary for the student's degree. A Plan of Study is intended to be flexible to meet the educational objectives of the student and to build on previous academic experiences. The student, along with the Supervisory Committee, should select courses that best support the student's research, overall academic program, and career goals.

A student's Plan of Study should be completed by the end of the student's 2nd semester (or before completion of 15 credit hours). Students may not file a Memorandum of Courses and graduate in the same term.

Requirements
- Only courses with 800 or 900 level course numbers can be counted for graduate credit
- Minimum of 30 semester credit hours
  - At least one-half (15 hours), including thesis credits, must be in Food Science and Technology (FDST)
  - Minimum of 8 credit hours must be 800 or 900 level without 400-level counterparts (excludes FDST 899)
  - 6-10 hours of FDST 899 Master Thesis credit hours
  - Minimum of 1 credit hour of FDST 896-002 Teaching Assistant
  - Minimum of 1 credit hour of FDST 951 Seminar
  - Minimum of 1 credit hour of FDST 952 Professional Communication

Transfer Credit
All graduate credits to be counted toward the satisfaction of the master's degree requirements, including all transfer credits, must be approved by the student's Supervisory Committee and the Dean of Graduate Studies. Prior course work is assessed in relation to its contribution to framing a research foundation for the degree. Each course accepted must be current and relevant in relation to the desired degree.

Not less than 50 percent of the course work required for any graduate degree must be completed at the University of Nebraska.

No graduate credits will be accepted as transfer credit toward a master's program at UNL if the course work is 10 years or older or if the course work has been applied toward a previously completed master's degree at any institution, including UNL. Professional courses may not be transferred toward a graduate degree.

Changes to Plan of Study
Changes may be made to an approved Plan of Study (MOC). Once the student and the student's supervisory committee agrees on the course change, the student's faculty advisor emails the FDST Graduate Coordinator and Office of Graduate Studies master's Programs Coordinator for final approval.

Mid-Program Comprehensive Exam – Research Proposal Defense

A student pursuing a Master of Science Degree with Thesis must complete a mid-program comprehensive exam by the end of the student's 3rd semester (or before completion of 20 credit hours). Students may not defend a research proposal and graduate in the same term.

The mid-program comprehensive exam consists of a research proposal on the student's intended project. The proposal should be written by the student and then orally defend in front of the student's Supervisory Committee. Areas to be evaluated include the student's knowledge of the science and methods to be used in the project and the student's ability to express their ideas orally and to answer questions related to the proposed project.

The Supervisory Committee Chair (faculty advisor) should be involved in planning and development of the research project but should not edit or rewrite the written research proposal. This document should be an accurate representation of the student's writing and reasoning abilities.

Written Research Proposal Requirements
- Submit at least two weeks before the oral defense, email the written research proposal and evaluation form to supervisory committee members, FDST Graduate Chair and Graduate Program Coordinator
- Written format as a grant proposal for USDA, NIH, or NSF
  o USDA: https://www.nifa.usda.gov/grants
  o NIH: https://grants.nih.gov/grants/about_grants.htm
  o NSF: https://www.nsf.gov/funding/preparing/
  o UNL Office of Research & Economic Development Checklists:
    https://research.unl.edu/sponsoredprograms/forms-templates/
- Proposal length is recommended to be 6 to 7 pages

Sections of a grant proposal can include, but are not limited to:
- Project Summary or Abstract
- Project Narrative or Description
- Bibliography and References

Oral Research Proposal Defense Requirements
- 20-minute seminar presentation with Supervisory Committee members
- Followed by oral examination by the Supervisor Committee

The supervisory committee members will complete Research Defense Evaluation Forms to provide constructive feedback. The Supervisory Committee may recommend:
1. Unconditional approval of the research project proposal
2. Conditional approval (the committee may specify remedial action to improve writing skills, additional course work to improve knowledge in a technical area critical to the research, or other action as necessary)
3. Not approved: The student will be given a second opportunity to prepare and defend a revised proposal within six months.

Reporting Results
- Copies of the Research Defense Evaluation Forms must be turned into the FDST Graduate Program Coordinator.
- If a student fails to pass the research proposal, the supervisory committee files a report on the failure to the FDST Graduate Chair and FDST Graduate Coordinator. The report must indicate what the student must do before taking another examination. Another examination may not be held during the same term. Only two attempts are permitted unless additional attempts are approved by the FDST Graduate Committee.

Thesis and Final Oral Defense

Please follow the Office of Graduate Studies (OGS) [Steps to Completion](#) in order to meet OGS deadlines. Keep in mind the anticipated graduation date. It takes 4-6 months to write a high-quality thesis. A publication is not required for graduation.

The master's thesis and abstract must be submitted to the supervisory committee chair (faculty advisor). The faculty advisor should be involved in helping the graduate student develop their thesis into an acceptable form.

Once approved, the Final Examination Report form must be submitted to the Office of Graduate Studies Masters Program Coordinator and FDST Graduate Program Coordinator at least four weeks prior to the oral defense.

An electronic copy of the thesis and abstract must be submitted to all supervisory committee members, Office of Graduate Studies Masters Program Coordinator, and FDST Graduate Program Coordinator for approval at least two weeks prior to the oral defense. All major revisions to the thesis should be completed *before* the oral defense. Minor revisions (such formatting or spelling) are permitted after the oral defense.

Written Requirements
- Office of Graduate Studies Written Format Guidelines: https://www.unl.edu/gradstudies/current/degrees/guidelines
- Make revisions based on corrections and recommendations after each evaluation

Oral Defense
- 45-minute public seminar presentation with 10 minutes for questions, open to faculty, graduate students, and guests
- Followed by oral examination by the Supervisor Committee (please allow 2 hours)

Oral presentations are open to the public and must be advertised. In-person presentations in FIC 277 with a Zoom option for remote attendees is the preferred format.

The following information should be sent to the FDST Communication Support Associate at least two weeks before the oral presentation.
- short biosketch, date, time, room, zoom link, advisors, presentation title, and headshot picture

Reporting Examination Results
1. If the committee agrees unanimously that the student has passed: Part 4 of the Final Examination Report is signed by all committee members present for the defense.
2. If only one member dissents: The dissenting member files a letter of explanation to the FDST Graduate Chair, FDST Graduate Coordinator and the Office of Graduate Studies, but the student is approved for the degree and Part 4 of the Final Examination Report is signed accordingly.
3. If more than one member dissents: The student fails to pass the final oral exam. The committee files a report on the failure to the FDST Graduate Chair, FDST Graduate Coordinator and the Office of Graduate Studies, indicating what the student must do before attempting another examination. A student may attempt a final oral exam only once per term.

Passed Examination
Once Part 4 and 5 of the Final Examination Report are signed by all committee members present for the defense, the Final Examination Report needs to be given to the student. It is the student's responsibility to turn in the signed Final Examination Report and final draft of their Thesis to the Office of Graduate Studies Masters Program Coordinator to get approval to upload their thesis.

Master of Science Degree with Project Requirements

Master of Science Degree (MS), Option B, is an applied science program using current knowledge to develop practical applications culminating in a project. MS Option B is considered a professional, terminal degree. It is designed for students who do not intend to pursue a graduate degree beyond a master's degree. Graduates of

the MS Option B program may be hired as technologists and specialists in industry. MS Option B students may already be employed in the food industry seeking to expand their education and possibility of promotion.

MS Option B students are expected to be self-funded and are not eligible for graduate assistantships.

Length of Program
- If enrolled full-time, students typically complete the Master of Science Project in 1 ½-2 years.
- Students must complete their Master of Science degree within 5 consecutive years from their first term of admission.

Supervisory Committee
A student's supervisory committee should be formed by the end of the student's 2nd semester (or before completion of 15 credit hours).

Requirements
- Minimum of three committee members
- Faculty advisor serves as chair
- At least two committee members must be Food Science and Technology faculty. The third member may be from Food Science and Technology or another department.

Minor: Students seeking a minor are required to have a graduate faculty member from the minor program on their Supervisory Committee. It is at the discretion of the minor faculty advisor as to whether they elect to be on the student's supervisory committee as long as a minor comprehensive exam is not required.

UNL Full-time Employees
To reduce conflict of interest, University of Nebraska-Lincoln full-time (1.0 FTE) employees must identify a faculty advisor other than their immediate work supervisor. Their work supervisor may serve on their supervisory committee as a member.

Plan of Study (Memorandum of Courses)
A Plan of Study consists of courses considered necessary for the student's degree. Plan of Study is intended to be flexible to meet the educational objectives of the student and to build on previous academic experiences. The student, along with the Supervisory Committee, should select courses that best support the student's research and overall academic program.

A student's Plan of Study should be completed by the end of the student's 2nd semester (or before completion of 15 credit hours). Students may not file a Memorandum of Courses and graduate in the same term.

Requirements
- Only courses with 800 or 900 level course numbers can be counted for graduate credit
- Minimum of 30 semester credit hours
  - At least one-half (15 hours), including project credits, must be in Food Science and Technology (FDST)
  - Minimum of 15 credit hours must be 800 or 900 level without 400-level counterparts (including FDST 897)
  - 4-6 hours of FDST 897 MS Project credit hours
  - Minimum of 1 credit hour of FDST 951 Seminar
  - Minimum of 1 credit hour of FDST 952 Professional Communication

Transfer Credit
All graduate credits to be counted toward the satisfaction of the master's degree requirements, including all transfer credits, must be approved by the student's Supervisory Committee and the Dean of Graduate Studies. Prior course work is assessed in relation to its contribution to framing a research foundation for the degree. Each course accepted must be current and relevant in relation to the desired degree.

Not less than 50 percent of the course work required for any graduate degree must be completed at the University of Nebraska.

No graduate credits will be accepted as transfer credit toward a master's program at UNL if the course work is 10 years or older or if the course work has been applied toward a previously completed master's degree at any institution, including UNL. Professional courses may not be transferred toward a graduate degree.

Changes to Plan of Study
Changes may be made to an approved Plan of Study (MOC). Once the student and student's faculty advisor agrees on the course change, the student's faculty advisor emails the FDST Graduate Coordinator and Office of Graduate Studies Master's Programs Coordinator for final approval.

Mid-Program Comprehensive Exam – Project Proposal

The Plan B project is done in lieu of a master thesis. The master's project provides an opportunity for students to integrate and apply the knowledge acquired throughout their master program. The project culminates in a presentation of the project findings through a project defense and final written report.

A student pursuing a Master of Science Degree with Project must submit a brief project description. The project description must be submitted to the Grad Committee with their Plan of Study by the end of the student's 2nd semester as part of their annual progress report (or before completion of 15 credit hours). By their 3rd semester (or before completion of 20 credit) they should submit and present a complete project proposal to their supervisory committee to obtain feedback. The guidelines for the written project proposal can be obtained from the department. Students should send their proposal accompanied by the evaluation form found on this link to receive and document feedback from their supervisory committee. Students may not present a project proposal and graduate in the same term.

Project Minimum Requirements
The project serves as proof of the student's understanding of theories and principles of Food Science and Technology, and their ability to apply that knowledge to solve a problem or fill in a knowledge gap related to some aspect of professional life. A master project would qualify as "suitable" if it provides students the opportunity to apply the skills and competencies acquired in the Food Science and Technology Master program to a problem/challenge/issue/knowledge gap likely to be encountered in professional practice.

The objective of the project is to evaluate the student's abilities to:
- Concisely define a problem/challenge/issue/knowledge gap
- Discuss the problem/challenge/issue/knowledge gap within the context of practice and/or policy in USA or globally
- Critically review research literature relevant to the topic
- Propose an experimental design or solution to address the problem/ challenge/ issue/ knowledge gap
- Describe the methodology proposed for the experimental design or solution
- Explain findings in a style appropriate for practice or scholarly publication
- Analyze and interpret findings and make appropriate conclusions and recommendations for policy/practice

Preparing the Project
The project manuscript must document the research process and line of reasoning in a logical clear order that allows others to evaluate the credibility of the work. The content and presentation of the project should meet the criteria of either a journal article or technical report, depending on the nature of the research. Students should consult their faculty advisor(s) and supervisory committee about the writing style early in the process.

The following is a guideline for the content of the project; however, the format may vary depending on the nature of the research (8-10 pages):
1. Title page and abstract
2. Introduction to the context: i.e., "why is this important? To you? Others?"
3. Goals and objectives of the project, clear statement of the topic or problem

4. Critical review of relevant literature (does not have to be a separate chapter like in a thesis)
5. Methods as appropriate to the form of the project
6. Results analysis and discussion
7. Implications and recommendations for application and/or policy
8. References

In the discussion section students are expected to integrate their findings with relevant literature, discuss the strengths and limitations of methods/approach/analysis and consider the implications of their work for practice. The guidelines for content of the final report can be found in the following link. Examples of previous final reports submitted by alumni of the MS option B program are available from the department.

For style and format students may use as the Office of Graduate Studies Written Format Guidelines, please note not all sections of the thesis may apply to the final project report: https://www.unl.edu/gradstudies/current/degrees/guidelines.

Project Examples
The master's project may take various forms, as long as it **fulfills the minimum requirements and does not match or exceed the expectations of a master thesis**. Some of those forms include but are not limited to the following examples:

- Research or Technical Report
  Involves the collection, analysis, and/or interpretation of data to address a food science or technology problem, report results on a client's project or describe the development of a new product or process. The research report should include an abstract, report body, references, and appendix.

- Primary Data Analysis
  Work for the master's project may also involve the primary collection and analysis of data, the experimental design should be well defined and delimited to one research objective. Data collection for the project is usually in the context of an ongoing study, but it is also possible (although not recommended) for students to initiate an original study under the guidance of a faculty member. The research may be published (not required) as part of a journal article or a technical note.

- Secondary Data Analysis
  Typically, a project research report is in the form of a secondary data analysis, using an existing data set. Please note that the appropriate ethics approval may need to be obtained for any paper that uses data gathered from human subjects. Even in cases where the data is de-identified, a determination should be sought from UNL's Internal Review Board. The research may be published (not required) as part of a journal article or a technical note.

- Food Safety and Defense Program Development and Implementation
  The project would involve the development of a HACCP, FSMA preventive control for human foods and food defense program plans to implement in a real food processing facility. The program should follow the guidelines and methodology stated by either USDA or FDA depending on the commodity in question, including a needs assessment and/or a risk assessment.

- Policy Analysis
  The project would involve analysis of the implications of a current or proposed policy or rule directly related to food safety, processing, or biotechnology. The project might include perspectives on food safety, processing, economics, and financing, need and demand, politics/ethics/law, or quality/effectiveness.

- Project Proposal
  The project would simulate either a grant proposal or a project business plan. The research question or business proposal must be related to food focusing in an area encountered in professional work, such as development of a new technology or investment on a new production line by a specific company.
  - The grant proposal would include a clear statement of the research question, the specific aims of the proposal, review of literature, study design, methods of analysis, implications, significance of the work and budget.
  - The project business plan would include a clear statement of the customer/consumer/company need, background of the company and rational of the project, project scope including measurable design goals, measurement methodology of goals, technical requirements and feasibility, market and cost analysis, and financial projections.

- Curriculum or Training Development, Implementation and Outcome Evaluation
  Involve the identification of a need, issue, or problem to be addressed using training and developing a curriculum guided by learning outcomes and tailored to a defined target audience. The developed curriculum would be then imparted to the identified target audience and evaluated for effectiveness at addressing the problem, need or issue identified. The process will be documented in a report outlining the relevance of the training, the development, implementation, outcomes, and recommendations.

- Critical analysis of literature and practices (as an option for students with experience in an area of knowledge)
  Review of literature should include either an analysis process (systematic review), or a constructive critique of the publications or methodologies to identify gaps or directions of the field. The final product should be in publishable format for outreach or scientific publication. Publication of the review is not required.

Project Final Paper and Oral Exam

Please follow the Office of Graduate Studies (OGS) Steps to Completion in order to meet OGS deadlines. Keep in mind the anticipated graduation date. It takes 4-6 months to write a high-quality project paper. A publication is not required for graduation.

The master's project must be submitted to the supervisory committee chair (faculty advisor). The faculty advisor should be involved in helping the graduate student develop their project into a publishable form.

Once approved, the Final Examination Report form must be submitted to the Office of Graduate Studies Masters Program Coordinator and FDST Graduate Program Coordinator at least four weeks prior to the oral exam.

An electronic copy of the final project paper must be submitted to all supervisory committee members and FDST Graduate Program Coordinator for approval at least two weeks prior to the results deadline.

Written Requirements
- Office of Graduate Studies Written Format Guidelines:
  https://www.unl.edu/gradstudies/current/degrees/guidelines
- Written format as a journal article for publication or other professional type of document depending on the nature of the project
- 15-20 double-spaced pages, not including references

Oral Exam
- 30-minute public seminar presentation with 5 minutes for questions, open to faculty, graduate students, and guests
- Followed by oral examination by the Supervisor Committee (please allow 1 hour)

Oral presentations are open to the public and must be advertised. In-person presentations in FIC 277 with a Zoom option for remote attendees is the preferred format.

Please send the following information to the FDST Communication Support Associate at least two weeks before your oral presentation.

- short biosketch, date, time, room, zoom link, advisors, presentation title, and headshot picture

Reporting Examination Results
1. The committee members should complete the evaluation form provided by the department and email it to the Graduate Program Coordinator with the MS option B Coordinator in copy.
2. If the committee agrees unanimously that the student has passed: Part 4 of the Final Examination Report is signed by all committee members present for the exam.
3. If only one member dissents: The dissenting member files a letter of explanation to the FDST Graduate Chair, FDST Graduate Coordinator and the Office of Graduate Studies, but the student is approved for the degree and Part 4 of the Final Examination Report is signed accordingly.
4. If more than one member dissents: The student fails to pass the final oral exam. The committee files a report on the failure to the FDST Graduate Chair, FDST Graduate Coordinator and the Office of Graduate Studies, indicating what the student must do before attempting another examination. A student may attempt a final oral exam only once per term.

Passed Examination
Once Part 4 of the Final Examination Report are signed by all committee members present for the exam, a copy of the Final Examination Report needs to be given to the student. It is the student's responsibility to turn in the Final Examination Report to the Office of Graduate Studies Masters Program Coordinator.

Doctoral Degree Requirements

The Doctoral Degree consists of original research that contributes new knowledge. It is the terminal research degree in Food Science and Technology and designed to prepare students for careers in research. Successful doctoral students may pursue postdoc and faculty positions in college or university or be hired as scientists and researchers in industry and government agencies. Building on their education and work experience, doctoral students achieve senior, manager, and director positions throughout their career.

The Doctoral Degree requires a dissertation. Students have the opportunity to prepare publications. Degree completion commitment by the student is required, through graduate assistantship funding offered by a faculty member within the Department of Food Science and Technology or another organization's funding (e.g., government fellowships, employer sponsorship, etc.), other than personal funds. Students are strongly encouraged to complete a Master of Science degree before entering into a Doctoral Degree.

Length of Program
- If admitted with a Master of Science degree and enrolled full-time, students typically complete the doctoral degree in 3-4 years.
- If admitted with a Bachelor of Science degree and enrolled full-time, students typically complete the doctoral degree in 5-6 years.
- Students must complete their Doctoral degree within 8 consecutive years of submitting the Plan of Study (Program of Studies) to the Office of Graduate Studies.

Supervisory Committee
A student's supervisory committee should be formed by the end of the student's 2nd semester (or before completion of 45 credit hours, including master's degree credits). The Doctoral Degree Supervisory Committee form must be submitted with or before the Plan of Study form.

Requirements
- Minimum of four committee members. Five are recommended in the event one member is on sabbatical or is otherwise unavailable.
- Faculty advisor serves as chair
- At least one committee member (outside representative) must be outside the Department of Food Science and Technology but within the University of Nebraska System (UNL, UNMC, UNO or UNK)

Minor: Students seeking a minor are required to have a graduate faculty member from the minor program on their Supervisory Committee. The minor faculty member may serve as the outside representative member.

Readers: Two readers must be selected from the supervisory committee. The advisor (and co-advisor if applicable) cannot be designated as a reader. It is the readers' responsibility to review and approve the dissertation prior to the Final Oral Examination.

Special Member: A faculty member from another institution outside the University of Nebraska system may serve as a fifth or sixth committee member on the student's committee. Special members may serve as readers and have voting rights for the student's committee. Only one special member may serve per committee. A special member may not serve as an outside representative. Students need to submit the Appointment of Special Committee Member form and CV when they submit their Supervisory Committee form.

UNL Full-time Employees
To reduce conflict of interest, University of Nebraska-Lincoln full-time (1.0 FTE) employees must identify a faculty advisor other than their immediate work supervisor. Their work supervisor may serve on their supervisory committee as a member.

Revisions
Changes may be made to a Supervisory Committee any time prior to the submission of the Application for Final Oral Exam by submitting the Change of Supervisory Committee form to FDST Graduate Coordinator to be approved by FDST Departmental Grad Comm Chair, then by the Dean of Graduate Studies.

University of Nebraska Faculty Employment Changes
- If the student has achieved Candidacy, chair change:
  - The former chair who has left the University may continue to serve as co-chair
  - A second co-chair must be appointed
- If the student has not achieved Candidacy, chair change:
  - A new chair of the Supervisory Committee must be appointed immediately
- Graduate faculty with emeritus status may co-chair the supervisory committees of doctoral students or serve as a committee member.
- If a member other than the chair leaves the employment of the University or retires, a replacement should be appointed.
- Faculty granted adjunct faculty graduate status after leaving the University may serve as a committee member

Plan of Study (Program of Studies)

A Plan of Study consists of courses considered necessary for the student's degree. Plan of Study is intended to be flexible to meet the educational objectives of the student and to build on previous academic experiences. The student, along with the Supervisory Committee, should select courses that best support the student's research and overall academic program.

A student's Program of Studies should be completed by the end of the student's 2nd semester (or at least 45 credit hours remaining to be taken). If a Program of Studies is submitted with less than 45 credit hours left to take, it needs to include a memo from the Supervisory Committee Chair/faculty advisor to the OGS Doctoral Coordinator and FDST Graduate Coordinator acknowledging the tardiness of the submission and reasoning.

Requirements
- Only courses with 800 or 900 level course numbers can be counted for graduate credit
- Minimum of 90 semester credit hours
  - At least one-half (45 hours), including dissertation credits, must be in Food Science and Technology (FDST)
  - 12-55 hours of FDST 999 Doctoral Dissertation credit hours
  - Minimum of 2 credit hours of FDST 896-002 Teaching Assistant

- o Minimum of 3 credit hours of FDST 951 Seminar if admitted with a master's degree OR minimum of 4 hours if admitted with a bachelor's degree
- o Minimum of 3 credit hours of FDST 952 Professional Communication if admitted with a master's degree OR minimum of 4 hours if admitted with a bachelor's degree

Transfer Credit
All graduate credits to be counted toward the satisfaction of the doctoral degree requirements, including all transfer credits, must be approved by the student's Supervisory Committee and the Dean of Graduate Studies. Prior course work is assessed in relation to its contribution to framing a research foundation for the degree. Each course accepted must be current and relevant to the desired degree.

Not less than 50 percent of the course work required for any graduate degree must be completed at the University of Nebraska.

No graduate credits will be accepted as transfer credit toward a doctoral program if the course work has been applied toward a previously completed doctoral degree at any institution, including UNL.

Changes to Plan of Study
Changes may be made to an approved Plan of Study (POS). Once the student and student's faculty advisor agrees on the course change, the student's faculty advisor emails the FDST Graduate Coordinator and Office of Graduate Studies Doctoral Programs Coordinator for final approval.

Mid-Program Comprehensive Exam – Research Proposal Defense
A student pursuing a Doctoral Degree must complete a mid-program comprehensive exam by the end of the student's 4th semester (or at least 30 credit hours remaining to be taken). The mid-program comprehensive exam covers both the FDST major and any applicable minor. Students must defend a research proposal and submit the Application for Admission to Candidacy form at least 7 months before their intended graduation.

The mid-program comprehensive exam consists of a research proposal on the student's intended project that the student will write and then orally defend in front of the student's Supervisory Committee. Areas to be evaluated include the student's knowledge of the science and methods to be used in the project and the student's ability to express their ideas orally and to answer questions related to the proposed project.

The Supervisory Committee Chair (faculty advisor) should be involved in planning and development of the research project but should not edit or rewrite the written research proposal. This document should be an accurate representation of the student's writing and reasoning abilities.

Written Research Proposal Requirements
- Submit at least two weeks before the oral defense, email the written research proposal and evaluation form to supervisory committee members, FDST Graduate Chair and Graduate Program Coordinator
- Written format as a grant proposal for USDA, NIH, or NSF
  - o USDA: https://www.nifa.usda.gov/grants
  - o NIH: https://grants.nih.gov/grants/about_grants.htm
  - o NSF: https://www.nsf.gov/funding/preparing/
  - o UNL Office of Research & Economic Development Checklists: https://research.unl.edu/sponsoredprograms/forms-templates/

Sections of a grant proposal can include, but are not limited to:
- Biosketch
- Project Summary or Abstract
- Project Narrative or Description
- Timelines
- Bibliography and References
- Facilities and Equipment
- Budget (encouraged, but not required)

Oral Research Proposal Defense Requirements
- 30-minute seminar presentation with Supervisory Committee members
- Followed by oral examination by the Supervisor Committee

The supervisory committee members will complete Research Defense Evaluation Forms to provide constructive feedback. The Supervisory Committee may recommend:
1. Unconditional approval of the research project proposal
2. Conditional approval (the committee may specify remedial action to improve writing skills, additional course work to improve knowledge in a technical area critical to the research, or other action as necessary)
3. Not approved: The student will be given a second opportunity to prepare and defend a revised proposal within six months.

Reporting Results and Admission to Candidacy
- Copies of the Research Defense Evaluation Forms must be turned into the FDST Graduate Program Coordinator.
- If a student fails to pass the research proposal, the supervisory committee files a report on the failure to the FDST Graduate Chair, FDST Graduate Coordinator and the Office of Graduate Studies. The report must indicate what the student must do before taking another examination. Another examination may not be held during the same term. Only two attempts are permitted unless additional attempts are approved by the FDST Graduate Committee.
- Upon successful competition of mid-program comprehensive exam (research proposal defense), turn in the Application for Admission to Candidacy form into the FDST Graduate Coordinator

Doctoral students who have achieved candidacy status must be continually enrolled every fall and spring semester until they graduate. Failure to maintain enrollment will result in the termination from the Food Science and Technology graduate program.

Dissertation and Final Oral Defense

Please follow the Office of Graduate Studies (OGS) Steps to Completion in order to meet OGS deadlines. Keep in mind the anticipated graduation date. It takes 6 - 8 months to write a high-quality dissertation. A publication is not required for graduation.

The dissertation and abstract must be submitted to the supervisory committee chair (faculty advisor). The faculty advisor should be involved in helping the graduate student develop their dissertation into a publishable form.

Once approved, the dissertation must be submitted to all supervisory committee members at least 4 weeks prior to the oral defense. All major revisions to the dissertation should be completed *before* submitting the Application for Final Oral Examination form and oral defense.

When the Application for Final Oral Examination form is signed by the two readers and supervisory committee chair (faculty advisor), the supervisory committee affirms that is ready to defend. Minor revisions (such formatting or spelling) are permitted after the oral defense.

Once approved by the reading committee members, the Application for Final Oral Examination form, full dissertation and abstract must be submitted to the Office of Graduate Studies Doctoral Program Coordinator and FDST Graduate Program Coordinator at least two weeks prior to the oral defense.

Written Requirements
- Office of Graduate Studies Written Format Guidelines:
  https://www.unl.edu/gradstudies/current/degrees/guidelines
- Make revisions based on corrections and recommendations after each evaluation

Oral Defense
- 45-minute public seminar presentation with 10 minutes for questions, open to faculty, graduate students, and guests
- Followed by oral examination by the Supervisor Committee (please allow 2 hours)

Oral presentations are open to public and must be advertised. In-person presentations in FIC 277 with a Zoom option for remote attendees is the preferred format.

Please send the following information to the FDST Communication Support Associate at least two weeks before your oral presentation.
- short biosketch, date, time, room, zoom link, advisors, presentation title, and headshot picture

Reporting Examination Results
1. If the committee agrees unanimously that the student has passed: A Report of Completion is signed by all committee members present for the defense.
2. If only one member dissents: The dissenting member files a letter of explanation to the FDST Graduate Chair, FDST Graduate Coordinator and the Office of Graduate Studies, but the student is approved for the degree and a Report of Completion is signed accordingly.
3. If more than one member dissents: The student fails to pass the final oral exam. The committee files a report on the failure to the FDST Graduate Chair, FDST Graduate Coordinator and the Office of Graduate Studies, indicating what the student must do before attempting another examination. A student may attempt a final oral exam only once per term.

Passed Examination
Once the Report of Completion is signed by all committee members present for the defense, the Report of Completion needs to be given to the student. It is the student's responsibility to turn in the signed Report of Completion and final draft of their Dissertation to the Office of Graduate Studies Doctoral Program Coordinator to get approval to upload their Dissertation.

Optional Minor Requirements

Adding a Minor
The minor must be listed on the Plan of Study (MOC or POS). All courses taken for the minor must be listed on the Plan of Study and be signed by a minor department representative.

Graduate students must consult with their faculty advisors to see if pursuing a minor is beneficial for their research, project or career path. Students seeking a minor should consult with the department issuing the minor to select appropriate courses, requiring a minimum of 9-15 credits.

Before considering a minor, please consider that graduate school is already highly specialized, focuses on research experiences, and requires less course work than a bachelor's degree. For a master's degree, you only need to complete 20-24 credits of course work. For a doctoral degree, half of your credits (45 hours) will be in your research experience.

Outside Minors
Food Science and Technology graduate students pursuing a minor outside the Department of Food Science and Technology. Minors must be completed within a degree program.

A minor may be taken in any one department or interdepartmental area that has been approved to offer a major leading to a master's degree. Students seeking a minor should consult with the department issuing the minor to select appropriate courses.

Students seeking a minor are required to have a graduate faculty member from the minor program on their Supervisory Committee. The comprehensive exam for the minor may be waived if all grades in the minor are at least a B or P (pass).

Office of Graduate Studies Guidelines:
- Master's Minor consists of a minimum of 9 credit hours in coursework
- Doctoral Minor consists of a minimum of 15 credit hours in coursework; with 6 credit hours must be 800 or 900 level without 400-level counterparts

Food Science and Technology Minor

Open to graduate students outside the Department of Food Science and Technology. Minors must be completed within a degree program.

Requirements
- A FDST departmental representative must be a member of the student's Supervisory Committee
- FDST courses must be taught by Food Science and Technology faculty members
- Master's Minor consists of a minimum of 9 credit hours in coursework
- Doctoral Minor consists of a minimum of 15 credit hours in coursework; with 6 credit hours must be 800 or 900 level without 400-level counterparts

The comprehensive exam for the minor may be waived if all grades in the minor are at least a B or P (pass). Courses taken to fulfill requirements for a graduate certificate and later applied toward a graduate degree must meet the minimum grade requirements for the degree, which may be higher.

Repeatable Course Maximum Credits
FDST 951 Advanced Food Science and Technology Seminar (offered every fall semester)

Master's Minor in FDST	Maximum of 1 hour
Doctoral Minor in FDST	Maximum of 1 hour

FDST 952 Professional Food Science Communication (offered every spring semester)

Master's Minor in FDST	Maximum of 1 hour
Doctoral Minor in FDST	Maximum of 2 hours

Food Safety and Defense Certificate Requirements

Food Safety and Defense Certificate Chair, Dr. Byron Chaves

The online Food Safety and Defense Graduate Certificate enables food industry professionals to pursue specialized in-depth training. Additionally, the Certificate can complement a graduate degree program.

The online Food Safety and Defense Graduate Certificate is a multi-institutional program being offered as part of the Great Plains Interactive Distance Education Alliance (GPIDEA / AGIDEA), in cooperation with the University of Nebraska-Lincoln, Kansas State University, and the University of Missouri.

Adding a Certificate

A graduate certificate comprises a set of credit-bearing graduate courses representing a specific subject area. Graduate certificates are designed for post-baccalaureate students seeking to enhance their educational portfolio.

Admission to and enrollment in a graduate certificate program occurs independently of graduate (master's and doctoral) degree programs. Students interested in pursuing a certificate must fill out an application for admission into the certificate program through the Office of Graduate Studies.

Certificates may be earned prior to or concurrently with a graduate degree. Certificate courses taken at the University of Nebraska that meet the minimum grade requirements may count toward a graduate degree. Courses taken and applied toward a previously awarded graduate degree or certificate cannot be counted toward a future graduate certificate. Courses completed at institutions other than the University of Nebraska cannot count toward a graduate certificate.

Tuition and Fees

Current cost is $655.25 per 1 credit hour. The total program requires 13 hours for a total of $8,505.25.

Graduate tuition and student fees are assessed by the credit hour and the program. Online students pay the online course fee, technology fee, and library fee. The Food Safety and Defense Certificate is not a degree program and may not qualify for federal student aid. If you have questions, please contact the Office of Scholarships and Financial Aid.

Minimum Grade Requirements

- A minimum grade of C is required. For coursework to count toward a Master of Science or Doctoral Degree in Food Science and Technology, the minimum grade is a B.

Length of Program

Generally, at least two courses are offered each Fall semester, Spring semester, and Summer term. Depending on the number of courses taken each semester/term, it can take 12-24 months to complete the Food Safety and Defense Certificate. Students must complete their Food Safety and Defense Certificate within 5 consecutive years.

- Great Plains IDEA Course Planner

Course Requirements

Required Core Courses (9 credit hours)
- FDST 805 Food Microbiology (UNL) [college-level microbiology course highly recommended] (3 credit hours)
- FDST 825 Food Toxicology (2 credit hours)
- FDST 871 Multidisciplinary Overview of Food Safety and Security (2 credit hours)
- FDST 872 Principles of Hazard Analysis and Critical Control Point System (HACCP) (2 credit hours)

Elective Courses (select 3 credit hours)
- FDST 855 Microbiology of Fermented Foods (2 credit hours)
- FDST 877 Advanced Food Microbiology and Biotechnology (2 credit hours)
- FDST 878 Food Protection and Defense: Essential Concepts (2 credit hours)

Student Resources

While enrolled in courses for the Food Safety and Defense Certificate, you are considered an UNL student and have access to most student resources including to the online Library resources. Additional costs are charged to use the University Health Center and the Campus Recreation Centers.

How to Enroll in Courses

Always work with your faculty adviser, Dr. Byron Chaves, to help you plan your classes. The Office of the Registrar offers excellent Registration Tips and Techniques to help trouble shoot most problems.

1. Fill out the online course request form: https://form.jotform.com/CASNR/GPIDEAregistrationform
2. Receive a permission code from Melissa Sailors and register online MyRED.

Application for Graduation – Certificate Completion

In order to complete the certificate program, you must apply for graduation during the last semester you are enrolled in courses. Applications for Graduation may be submitted electronically via MyRED.

Transfer Coursework to Graduate Degree Program

Certificates may be earned prior to and concurrently with a graduate degree. Certificate courses taken at the University of Nebraska and that meet the minimum grade requirements may count toward a graduate degree. Courses taken and applied toward a previously awarded graduate degree or certificate cannot be counted toward

a future graduate certificate. Courses completed at institutions other than the University of Nebraska cannot count toward a graduate certificate.

Changing Degree Objectives

Currently enrolled students who wish to change their degree objective with Food Science and Technology must submit the following to the FDST Graduate Committee Chair and FDST Graduate Program Coordinator.

Criteria to change degree programs are similar to those that would be considered for admissions for any student initially applying to the Food Science and Technology graduate program.

Changing from MS Thesis to PhD
- A letter of support for the change from their faculty advisor to Graduate Chair
  - If applicable, including their willingness to provide financial support
- A brief statement explaining the request to change your degree and justification

Changing from PhD to MS Thesis
- A letter of support for the change from their faculty advisor to Graduate Chair
  - If applicable, including their willingness to provide financial support
- A brief statement explaining the request to change your degree and justification
-

Changing from MS Thesis to MS Project
- A letter of support for the change from their faculty advisor to Graduate Chair
- A brief statement explaining the request to change your degree and justification
- If a student has used full-time certification, they may not change their degree objective from thesis to project

Changing from MS Project to MS Thesis
- Once a student has been accepted into the MS Project (option B) program, they cannot change to MS Thesis (option A).

Graduate School Expectations

Professionalism
Graduate school is vastly different from undergraduate education. It is more than just taking more classes at a higher level. Graduate students join a community of scholars and are expected to contribute – even create new information to expand knowledge within the food science and technology discipline.

Graduate students are treated as professionals, and responsible to develop and demonstrate their ability to be an independent scholar. Faculty advisors and graduate students need to work together to set expectations and essential commitments. Where problems in mentoring relationships occur, they are most often due to misunderstandings and lack of clear communication.

Guidelines for Good Practice in Graduate Education
Graduate students and faculty advisors should review the Guidelines for Good Practice in Graduate Education. The guidelines include graduate student role and faculty roles in professionalism/ethics, teaching, research, and advising/mentoring.

Workload
Graduate students are expected to master subjects and to devote substantial time to independent library or laboratory investigation. Additional time is associated with academic research leading to the successful completion of the student's thesis, project or dissertation and includes scholarly work such as reading and synthesizing scientific literature, technical writing, laboratory work, data management, graphics and presentation preparation, and quantitative analyses. Graduate students are expected to network with fellow scholars by

attending seminar presentations and regional and national professional meetings and conferences. There is no limit to time spent on studies and research relating to the advanced degree.

All graduate students are expected to maintain daily working hours while conducting research or developing projects. Graduate students are responsible for keeping their faculty advisor informed of their status and how they may be reached.

Undergraduate student holidays, semester breaks, and summers are not graduate student holidays. These periods provide an excellent opportunity for concentrated research or project. Graduate students are eligible for all University staff holidays (e.g., New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas).

Graduate assistants are required to work an average of 19.6 hours per week teaching or doing research for their faculty advisor, while being enrolled as a full-time student. This is in addition to course work and research for their thesis or dissertation. Their assistantship, thesis, and dissertation research activities, along with academic coursework, all constitute a full-time job.

Time Management

All graduate students are expected to manage time effectively for maximum professional development as well as personal health and well-being and balance competing demands such as being a student, graduate assistant, parent, spouse, caregiver, etc.

Graduate school will go much faster than anticipated. Students are responsible for tracking their progress and deadlines. Graduate students should develop a work plan that includes both short-term and long-term objectives as well as a series of deadlines for completing each step.
- The Individual Development Plan (IDP): Chart Your Course

Keep in mind the anticipated graduation date. It takes 4-8 months to write a high-quality thesis or project paper, or dissertation that could meet publication standards.

Research and Projects

Project Development

Students decide to work with a particular faculty advisor within a broadly defined area. The specific research or project problem within this area is usually suggested by the faculty advisor. This is appropriate in the beginning of a student's graduate education since they may not have the experience to fully appreciate the proposed research or project problem in the context of the field. In attempting to solve the assigned research or project problem, the student will benefit from the ideas, expertise, and guidance of their faculty advisor.

During the course of their graduate program, the student should become increasingly familiar with the subject of the investigation and, upon program completion, may well have greater expertise than their faculty advisor. It is assumed that the general research or project area in which the specific problem fits is one in which the faculty advisor will continue to work. It is to the mutual benefit of the student and faculty advisor to agree, before the student's departure, on the responsibilities for future work in the general research or project area.

Full-time Industry Employees

Often full-time industry employees have a specific research or project problem upon which they wish to work on. Industry employees need to work closely with their employer and faculty advisor to develop a project or research problem that can be shared through a written thesis, dissertation or project paper and oral presentation. It is to the mutual benefit of the student, employer, and faculty advisor to agree, before the student's departure, on the responsibilities for future work in the general research or project area.

Safety and Research Responsibility Training

Safety is the responsibility of every member of the University of Nebraska-Lincoln community. All students will receive the appropriate safety training *prior* to participating in research projects.

Students need to work with their faculty advisors to determine what safety and research training is required. Certificates of completion must be kept on file. Refresher training may be required throughout a degree program.

Safety Training

The University of Nebraska-Lincoln Environmental Health and Safety (EHS) provides web-based training.
- Core 1 - Injury and Illness Prevention Plan (IIPP)
- Core 2 - Emergency Preparedness Training
- Chemical Safety Training
- Biosafety 100: Research Compliance
- Bloodborne Pathogens for Laboratory Workers
- Fire Extinguisher Training

Departmental Autoclaves

To use and have access to the Food Innovation Center autoclaves, graduate students or faculty advisors need to contact Dr. Jayne Stratton, FDST Safety Committee Chair, to set up autoclave training.
- EHS Autoclave Operation SOP
- EHS Autoclave Operation Online Training

Personal Protective Equipment (PPE)

- EHS Personal Protective Equipment (PPE) Online Training

Wear closed-toe shoes at all times where chemicals are stored or used. Do not wear sandals, open toed shoes, or flip-flops in laboratories. Shorts, cut-offs, skirts, and shorter pants such as carpi pants, pedal pushers and clam diggers are not appropriate when working in the lab. These offer no barrier between you and biological, chemical and physical hazards. Wear sturdy, supportive, slip-resistant shoes and long pants.

Please follow your lab or pilot plant PPE protocols for eye, hand, head, and protective clothing protection.

Standard prescription eyewear is not a substitute for safety eyewear. However, prescription eyewear can be designed to also serve as safety eyewear. Consult your supervisor if you need a need for prescription safety eyewear.

Human Research Subjects

The Institutional Review Board (IRB) oversees Human Research Protection Program (HRPP). Research staff, including graduate students, are required to complete CITI training if they have direct contact with human participants (e.g., for subject recruitment, data collection) or who have access to information that links participants' names with their data.

Research staff, including graduate students, who work with the non-identifiable data (e.g., data entry, data analysis) and who have no contact with participants AND no means of identifying participants or linking participants' names to their data are not required to complete training.

Animal Research Subjects

Research staff, including graduate students, working with animals are required to complete Institutional Animal Care and Use Committee (IACUC) training through Collaborative Institutional Training Initiative (CITI).

Embargo Option

The University of Nebraska-Lincoln offers three embargo options through ProQuest (for dissertations) and Digital Commons (for thesis): six months, one year, and two years.

These options are available when the student uploads the PDF of the dissertation to ProQuest or the thesis to Digital Commons.

The Process of Placing the Embargo

Ownership of Data and Intellectual Property

Research Materials and Data
All data and records pertaining to the research activities are the property of the Department of Food Science and Technology at the University of Nebraska-Lincoln.

Research materials such as lab notebooks and research files shall remain the property of the faculty member(s) responsible for directing the project.

The same applies to other items such as photographs, microscopic slides, specimens, models, and computer programs that might have been developed as a part of the graduate activities.

Intellectual Property
University of Nebraska Board of Regents (BOR) policy requires that, as employees of the University all faculty, staff, and some students, disclose and assign every invention or discovery resulting from the performance of duties within the scope of University employment, or from the use of University resources to the University. The University has three policies that govern intellectual property.

- BOR Bylaw 3.10, establishes University ownership of inventions. When the Board of Regents established policy 3.10, the intent was to encourage the commercialization of inventions and discoveries arising from research activities of the University, and when appropriate, the pursuit of patents or other intellectual property protection.
- BOR Policy 4.4.1, establishes the copyright policies for the various copyright works and development scenarios that can occur on campus.
- BOR Policy 4.4.2, the patent and technology transfer policy, governs invention disclosure, intellectual property protection, and licensing. This policy outlines the steps that the University can take to protect its Intellectual Property and how the innovator can also benefit.

Ownership of Copyrights in Student Works

Theses, Dissertations and Other Student Works
Students will own the copyrights to their theses, dissertations, and other student works; however, a student must, as a condition to a degree award, grant royalty-free nonexclusive permission to the University to store copies of such works for archival purposes and to reproduce and publicly distribute copies of his or her thesis or dissertation within the University education and research missions; provided however, that should the student identify any legitimate proprietary interest the student may have in the work, or should the University determine that it has an ownership interest in any patentable or otherwise protectable Intellectual Property interest in the work, the University shall then delay any public access to the work for up to one year following the presentation of the work, in order for the student to consult with the University regarding the protection of the proprietary interest. Copyright ownership of theses or dissertations generated by research that is performed in whole or in part by a student with the support of a sponsor or grant shall be determined in accordance with the terms of the sponsored research or grant agreement, or in the absence of such terms, the copyright shall be owned by the University.

Software, Patentable Subject Matter and Non-Copyright Intellectual Property
Software, patentable subject matter, and other Intellectual Property contained or disclosed in theses, dissertations and other student works shall be subject to and governed by the policies that apply to University employees.

Student Writings Other Than Theses or Dissertations
Students shall own the copyrights to all student writings not commonly referred to as theses or dissertations and to other creative expressions required in the course of class assignments. The University shall retain the right to keep original examination scripts and to possess a copy or record of other student works for purposes of assigning grades, maintaining archival materials, and record keeping.

Suggested Courses

The Food Science and Technology Graduate Committee recommend the following courses to help students prepare for research and writing. Students should work with their faculty advisor and supervisory committees to see if any of these courses would be beneficial in their Plan of Study.

- FDST 866 Scientific Method in Practice (fall)
- STAT 801A Statistical Methods in Research: Non-Calculus (fall, spring)
- STAT 802 Design and Analysis of Research Studies
- NRES 800 Sampling, Data Management and Visualization (fall)
- AGRO 803 Scientific Writing and Communication (spring)
- ASCI 896 Independent Study: Grant Writing for Life Science (spring)
- NRES 891A Writing in Science (fall)

Academic Integrity

Joining the Food Science and Technology graduate program means creating new knowledge to contribute to the food science and technology discipline. Graduate students will work with their faculty advisor and supervisory committee to create an independent research project.

Evidence of academic integrity violations can result in a probation, termination or dismissal. Students dismissed from the University due to violations of the Student Code of Conduct are ineligible to reapply for graduate study at the University of Nebraska-Lincoln.

Plagiarism
"Presenting the work of another as one's own (i.e., without proper acknowledgement of the source) and submitting examination, theses, reports, speeches, drawings, laboratory notes or other academic work in whole or in part as one's own when such work has been prepared by another person or copied from another person. Materials covered by this prohibition include, but are not limited to, text, video, audio, images, photographs, websites, electronic and online materials, and other intellectual property." [UNL Student Code of Conduct]

Writing, Citations & Preventing Plagiarism Tools (UNL Libraries)
- Citation Tools
- Turnitin

Reporting Violations of Academic Integrity
Faculty advisors and supervisory committees are required to report violations of academic integrity.

Grant Writing Seminar

The Office of Research and Economic Development offers an annual Write Winning Grant Proposals seminar each Spring semester. Participants able to select one of the seminar's four workbooks, depending on the source from which they plan to seek funding: National Institutes of Health, National Science Foundation, U. S. Department of Agriculture, or a general version geared towards smaller funding agencies and foundations.

UNL Libraries: FDST Research Guide

There is an online guide to Libraries' resources and services for Food Science & Technology Research Guide available at http://unl.libguides.com/foodscitech. (It also links to information from other reliable organizations and services.)

Statistical Cross-disciplinary Collaboration and Consulting Lab (SC3L)

The Statistical Cross-disciplinary Collaboration and Consulting Lab (SC3L) is a free service available to students, faculty, and staff at the University of Nebraska who are in need of assistance with a Master's thesis, a PhD dissertation, or faculty research.

IANR Science Communication Hub

Regardless of a chosen field or career path, students must communicate well when working in STEM. The [IANR Science Communication Hub](#) is dedicated to supporting IANR students, postdocs, and faculty to develop essential communication skills and reach their scientific writing and science communication goals.

An IANR Graduate Student Science Communication Workshop is offered every September. Students may also sign up for the weekly writing group each semester.

Writing Center

All members of the UNL community (students, faculty, and staff) are welcome. All forms of communication are welcome, from lab reports, presentations, and research papers to cover letters, application essays, and graduate theses and dissertations. Writing Center Consultants can work at any stage of the writing process, from brainstorming and organizing ideas through polishing a final draft. Sign up for appointments by visiting the [Writing Center website](#).

Probation and Termination

Probation

Students on probation are not eligible for graduate assistantships. The funding will stop within one month of being placed on probation.

Graduate students may be placed on probation by their supervisory committee with support from the Food Science and Technology Graduate Committee under the following conditions:
- Failure complete Student Progress Report and meet at least once a year with supervisory committee, resulting in "Unsatisfactory"
- Receiving "Unsatisfactory" on their Student Progress Report
- Failure in qualifying examinations, preliminary examinations, comprehensive examinations, or final degree examinations
- Failure to master the methodology and content of one's field in a manner that is sufficient to complete a successful thesis or dissertation
- Violations of the [Student Code of Conduct](#)
- Violations of [Academic Integrity](#)

The faculty advisor or supervisory committee must submit a written six-month improvement plan to the FDST Graduate Committee. If the FDST Graduate Committee approves, the FDST Graduate Committee Chair must communicate it in writing to the Dean for Graduate Studies and the student.

Termination

Graduate students may be terminated by their supervisory committee with support from the Food Science and Technology Graduate Committee under the following condition:
- Failure to satisfy conditions required for removal of probationary status
- Violations of the [Student Code of Conduct](#)
- Violations of [Academic Integrity](#)

The faculty advisor or supervisory committee must submit a written recommendation for termination to FDST Graduate Committee. If the FDST Graduate Committee approves, the FDST Graduate Committee Chair must communicate it in writing to the Dean for Graduate Studies and the student.

Appeal Procedure

In all cases, appeals are made in writing to the appropriate advisor, committee, or council.

1. The initial appeal is to the student's faculty advisor
2. If denied, the appeal may be submitted to the student's supervisory committee
3. If denied, the appeal may be submitted to the Food Science and Technology Graduate Committee
4. If denied, an appeal may be made to the campus Graduate Council

The student's written initiation of the appeal must be filed within 30 days following the student's receipt of the official written notification by Graduate Studies. Full Termination Appeals Procedures

Tuition and Fees

Graduate tuition and student fees are assessed by the credit hour and the program.
Estimated expenses are included at:
- Financial Resource Certification form
- Financial Aid Office's Estimated Cost of Attendance

Enrollment

How to Enroll
- Students should always work with their faculty adviser to help plan classes.
- Students should use the *FDST* call number when registering for any cross-listed courses.
- Students register for courses online through MyRED.
- Registration for courses starts in March for summer term and fall semester courses, and in October for spring semester courses. The Office of the University Registrar's Registration Dates should be followed to ensure enrollment is done in a timely manner and avoid late registration fees.
- The Office of the Registrar offers excellent Registration Tips and Techniques to help trouble shoot most problems.

Permission Codes
If a permission code is required for a course, students should first contact the instructor to request a permission code.

Minimum Enrollment Requirements
Graduate students should follow the minimum enrollment requirements set by their graduate assistantship, government funding guidelines, student visa status, educational loan deferment program, etc.

Students with graduate assistantships are expected to be enrolled in full-time status. Graduate assistants are not required to register for courses during the summer term.

Status	Minimum Enrollment Fall or Spring Semester	Minimum Enrollment Summer Term
Full-time Status	9 credits hours OR 1 credit hour if Full-Time Certified	6 credit hours OR 1 credit hour if Full-Time Certified
Eligibility for Graduate Assistantship	9 credits hours OR 1 credit hour if Full-Time Certified	0 credit hours
Exempt from FICA/Medicare Withholding on Graduate Assistantship	4 credit hours OR 1 credit hour if Full-Time Certified	4 credit hours OR 1 credit hour if Full-Time Certified
Access to UNL Services (building door access, libraries, health center, rec center)	1 credit hour	1 credit hour

Maximum Registration Guidelines
Graduate students who are employed (any type of employment, including GRAs and GTAs) are advised not to exceed the following registration guidelines established by the Graduate Council.

Hours Employed per Week	Fall or Spring Semester	Summer 8-week Session	Summer 5-week Session
0 hours	15 credit hours	9 credit hours	6 credit hours
8-16 hours	12 credit hours	8 credit hours	5 credit hours
17-20 hours	10 credit hours	6 credit hours	4 credit hours
21+ hours (Full-time)	6 credit hours	4 credit hours	3 credit hours

Full-Time Certification to Enroll in less than 9 hours

Students may request full-time status certification to enroll in less than 9 credit hours. This is used toward the end of a student's degree program allowing them to focus on their research and writing their thesis or dissertation. It saves money for both student and faculty advisor while completing their degree in a timely manner.

First Step

Enroll in courses for the term you plan to apply for full-time status certification. You must be enrolled in at least one credit hour before submitting the online form.

Application

Students must submit an online full-time status certification form every semester or term they are enrolled and need full time status while enrolling in less than 9 credit hours for fall and spring semesters and 6 credit hours in the summer term.

Eligibility

The student must be currently registered for at least one credit hour and have been registered at least half time (i.e., at least 4 credits) in the fall and spring terms prior to the initiation of the full-time certification status.

Master of Science with Thesis (Option A) Students
- Grad Studies approved Memorandum of Courses
- Limitations: may use it no longer than 3 consecutive terms (including summer)

Doctoral Students
- Grad Studies approved doctoral candidacy application
- Limitations: may use it no longer than 24 consecutive months (or 6 consecutive terms, including summer)

Doctoral Students in Candidacy

Doctoral students who have achieved candidacy status must be continually enrolled every fall and spring semester in at least 1 credit hour until they graduate. Failure to maintain enrollment will result in the termination from the Food Science and Technology graduate program.

Special Consideration for International Students

International students are highly encouraged to contact the International Student and Scholar Office (ISSO) if they have any questions about remaining in good standing.

Fall and Spring
- Register as a full-time student every Fall and Spring semester until they graduate.
- No more than 3 credits or one class of online or distance education per semester may count towards the full-time enrollment requirement

Summer
- If admitted in summer, international students must be enrolled full-time, or 6 credit hours.
- If completing their degree in May, June, July or August, international students must be enrolled in a minimum of 1 hour for the summer. They should enroll in the session when they finish their oral examination.
  - If a student's oral examination is completed in June, they should enroll in the 1st 5-week session.
  - If a student's oral examination is completed in July, they should enroll in the 2nd 5-week session.
- If not starting or finishing their program, international students are not required to register for courses during the summer term.

Special Consideration for Graduating Students

Domestic Students without Graduate Assistantship
- Not required to enroll in their last semester or term unless they need to finish coursework on their Plan of Study

Domestic Students with Graduate Assistantship
- If graduating in the Fall or Spring semester: Must enroll in a minimum of 1 hour their last semester or term and submit a full-time certification request

International Students
- Must enroll in a minimum of 1 hour their last semester or term to maintain their immigration status

International Students pursuing MS Project (Option B)
- If an international student is required to enroll full-time in their final semester, but they have less than 9 hours remaining. MS Project or self-funded international students have the option to submit Certification for Reduced Course Load form for their final semester. This form must be submitted and approved before their final semester.

Academic Leave of Absence

An Academic Leave of Absence can be used to suspend study for one semester up to a full academic year during which the student is not expected to make progress toward their degree. Students on leave of absence may not enroll in courses.

Inactive Student Records

If a student does not enroll in courses for three consecutive terms (without approved Academic Leave of Absence), their records will be inactivated. They must reapply for admission to enroll in courses and complete their degree or certificate.

Withdrawal

To withdraw from the University of Nebraska-Lincoln, the student should send a written notice to their faculty advisor, graduate program coordinator and the Office of Graduate Studies. The Office of Graduate Studies will discontinue their academic program. Please review the Office of the University Registrar's policy on University Withdrawal and Cost of Withdrawal.

Courses
- Only courses with 800 or 900 level course numbers can be counted for graduate credit.
- Full course description are available online at https://catalog.unl.edu/graduate-professional/courses/

Food Science and Technology Courses

Dept	UG	GR	Title	Cr. Hrs	Fall Every	Fall Odd	Fall Even	Spring Every	Spring Odd	Spring Even	Summer Every
FDST	403	803	Food Quality Assurance	3				X			
FDST	405	805	Food Microbiology	3	X			X			
FDST	406	806	Food Microbiology Lab	2	X			X			
FDST	415	815	Molds and Mycotoxins	3		X					
FDST	425	825	Food Toxicology	2					X		
FDST	430	830	Sensory Evaluation	3		X					
FDST	442	842	My Gut, My Health, My Food	3				X			
FDST	448	848	Food Chemistry	3	X						
FDST	449	849	Food Chemistry Lab	1	X						
FDST	452	852	Physical Chemistry in Foods	2							
FDST	455	855	Microbiology of Fermented Foods	2				X			

Dept	UG	GR	Title	Cr. Hrs	Fall Every	Fall Odd	Fall Even	Spring Every	Spring Odd	Spring Even	Summer Every
FDST	455	855L	Microbiology of Fermented Foods Lab	1				X			
FDST	458	858	Advanced Food Analysis	3				X			
FDST	460	860	Food Product Development Concepts	3				X			
FDST	465	865	Food Engineering Unit Operations	3				X			
FDST	470	870	Nutraceuticals and Functional Foods	3						X	
FDST	492	892	Food Safety Auditor	2				X			
FDST		801	Teaching Applications of Food Science	3							X
FDST		823	Food Safety Risk Analysis	3					X		
FDST		866	Scientific Method in Practice	1	X						
FDST		867	Computational Genomics for Food and Nutritional Sciences	3	X						
FDST		880A	Food Carbohydrates	2			X				
FDST		880L	Food Lipids	2		X					
FDST		880P	Food Proteins	2						X	
FDST		908B	Food Borne Pathogens	2					X		
FDST		908E	Readings in Food Microbiology	2						X	

Great Plains Interactive Distance Education Alliance

Great Plains Interactive Distance Education Alliance (GP*IDEA) is a partnership of public universities providing online educational programs and courses. The Department of Food Science and Technology participates with the Food Safety and Defense Certificate.

Students interested in enrolling in these courses should
1. Fill out the online course request form: https://form.jotform.com/CASNR/GPIDEAregistrationform
   - Fill out the Student Acknowledgement Form
   - Fill out the Advisor Permission form which includes uploading your Plan of Studies
2. Receive a permission code from Melissa Sailors and register online MyRED.

Dept	GR	Title	Cr. Hrs	Spring Every	Spring Odd	Summer Every
FDST	871	A Multidisciplinary Overview of Food Safety and Security	2			K-State
FDST	877	Advanced Food Microbiology and Biotechnology	3		Univ Missouri	
FDST	878	Food Protection and Defense: Essential Concepts	2	K-State		

University of Nebraska Intercampus

Graduate students are eligible to take courses at the University of Nebraska-Lincoln (UNL), University of Nebraska Omaha (UNO), University of Nebraska at Kearney (UNK) and the University of Nebraska Medical Center (UNMC). Food Science and Technology graduate students wishing to take courses at UNO, UNK or UNMC must fill out an Intercampus Application. A new application is required for each semester the graduate student wants to take a course at a different campus.

- University of Nebraska Omaha Graduate Courses
- University of Nebraska at Kearney Graduate Courses
- University of Nebraska Medical Center Graduate Courses

Food Processing Center Workshops

The Food Processing Center Workshops provide a variety of unique educational and training opportunities. Each program is designed specifically for the food manufacturing industry. Information is presented by industry and academic faculty experts.

Graduate students are eligible to enroll in the following workshops and receive academic credit. Students must pay the FPC workshop fee and enroll in FDST 993.

Dept	GR	Title	Cr. Hrs	Fall Every	Summer Every
FDST	993	Extrusion Workshop	1		X
FDST	993	Better Process Control	1	X	

Additional workshop options include the following. Each workshop requires registration and a fee.
- Better Process Control School for Acidified Foods
- Food Microbiology Workshop
- FSMA Diagnostic Workshop
- FSPCA Preventive Controls for Human Food
- FSPCA Preventive Controls for Animal Food
- National Food Entrepreneur Program

Digital Badges

A digital badge is a microcredential indicating knowledge, skills, and competencies gained through various learning and professional development opportunities and can be displayed across various digital platforms such as social media and digital portfolios. A digital badge is a non-credit learning experience.

JEDI Digital Badge

The JEDI digital badge explores aspects of cultural awareness, openness, and identity that are foundational to concepts of justice, equity, diversity, and inclusion (JEDI). There is no cost for this digital badge.

Food Allergen Fundamentals Digital Badge

Food allergens remain a critical food safety concern for manufacturers throughout the food industry. Developing and implementing effective allergen control plans requires a robust understanding of foundational food allergen concepts. The FARRP Food Allergen Fundamentals digital badge is designed both for industry professionals new to a role with food allergen management responsibilities and for those wanting a refresher on core food allergen concepts. Cost: $50.

Professional Development Opportunities

Publications and Presentations

In addition to preparation of a thesis and/or dissertation, students are strongly encouraged to prepare manuscript(s) of their research results for publication and/or presentation at scientific meetings. The student will gain valuable experience from the efforts that go into publishing results and presenting scientific research. The student and faculty advisor work closely on such efforts.

Office of Graduate Studies
- Workshops
- On-Demand Professional Development Training (Canvas)

Teaching Development
- Teaching Development Program (TDP)
- Center for the Integration of Research, Teaching and Learning (CIRTL) Certificate Program
- Preparing Future Faculty (PFF)

Improvement of Communication and Leadership Skills
- Departmental Outreach Events
- Food Science and Technology Research Symposium
- UNL Research Days (poster presentations and slam)
- Nebraska Union Toastmasters Club (a public speaking club)

Development of Professional Identity
- Join professional associations and societies
- Attend conferences and use these opportunities to network with others
- Attend seminars offered by UNL departments

Leadership
- Pursue leadership opportunities through Graduate Student Assembly, Food Science Club, Phi Tau Sigma or other Recognized Student Organizations
- Mentor undergraduate and junior graduate students

Internships
The Food Science and Technology Graduate Program does not require an internship experience, or guarantee an internship placement. Students are responsible for finding their own internship opportunity.

It is important for the student and faculty advisor to plan ahead together about a participation in an internship, especially with respect to the expected outcomes of the internship and balancing the internship with thesis/dissertation research activities. When an internship is determined, FDST 895 Graduate Internship Experience for 1 credit hour needs to be included on the Plan of Study. Careful planning and early inclusion of planned internship in the Plan of Study can minimize the possible delay in submission of necessary paperwork for graduation.

Things to Know
Graduate students on assistantships cannot participate in an internship as that puts their workload over the allowed hours for working. Students are not permitted to accept outside employment, unless approved by the student's faculty advisor. If a graduate assistant accepts outside employment that is paid and full-time (40 hours per week), including internships, with approval from their faculty advisor, their assistantship ends based on their outside employment start date.

International students will need to consider internships several months in advance of participation in them. Curricular Practical Training (CPT) approval is required prior to entering into an internship. According to the International Student Scholar Office, an essential component of CPT is that the internship must be an integral part of the student's academic program for which the student must be enrolled in a course and gaining academic credit(s).

Assistantships

The Department of Food Science and Technology offers Graduate Research Assistantships (GRAs) and Graduate Teaching Assistantships (GTAs) to qualified students.

Eligibility
- Applicants for the Master of Science Degree with Thesis
- Applicants for the Doctoral Degree

When a student applies to the Food Science and Technology Graduate Program, they are automatically considered for graduate assistantships. No additional forms are required.

Students awarded graduate assistantships are expected to be fully committed to their academic program until graduation.

Appointments

Graduate assistant appointments are made on an annual basis. Appointments are renewable if the student remains in good academic standing and continues to make satisfactory progress as determined by the student's faculty advisor and supervisory committee.

Outside Employment

If a graduate assistant accepts outside employment, including internships, with approval from by their faculty advisor that is paid and full-time (40 hours per week), then their assistantship ends based on their outside employment start date.

Hours

Graduate assistants are required to work 19.6 hours per week (0.49 FTE) during the length of the appointment. Graduate teaching assistants (GTA) are expected to complete an Agreement of Duties form with their course instructor and/or the FDST Teaching Lab Manager at the beginning of each semester. Graduate research assistants (GRA) are highly encouraged to discuss expectations for research work with their supervisor each semester, including summer.

Additional Hours Related to Academic Work

The assistantship work hours are in addition to course work and research work for thesis or dissertation. There is no limit to time spent on studies and research relating to the advanced degree. Graduate students are expected to master subjects and to devote substantial time to independent library or laboratory investigation beyond the workload required of a graduate assistantship. The additional time is associated with academic research leading to the successful completion of the student's thesis or dissertation and includes scholarly work such as reading and synthesizing scientific literature; technical writing; field or laboratory work or both; data management; graphics and presentation preparation; and quantitative analyses. Thesis and dissertation research activities, along with academic coursework, all constitute considerably more than a full-time job, and will contribute significantly to your professional development.

Research Assistantship Responsibilities (GRA)

Graduate Research Assistants are directly responsible to their faculty advisor offering the research assistantship. In addition to conducting their own research (FDST 899 or FDST 999), Graduate Research Assistants are expected to assist their faculty advisor with research projects other than their own, special and extension projects, to train other students, and to perform other relevant academic duties.

Graduate Research Assistants are expected to pursue an academic area and conduct research consistent with the mutual interests of the student and one's faculty advisor offering the research assistantship. This combined effort results in a thesis or dissertation for the student, the completion of grant objectives for the faculty advisor, and manuscripts published in scientific journals jointly authored by the student and faculty advisor.

Teaching Assistantship Responsibilities (GTA)

Your teaching assistantship supervisor is the Department Head. The Lab Manager in collaboration with the course instructors and the Department Head will oversee and direct your day-to-day duties. Teaching assistants are expected to start at least one week before classes begins through one week after final exams.

Graduate teaching assistants are expected to assist with two courses or sections per week. This includes time outside the course to attend lab safety training, attend weekly preparatory meetings scheduled by the supervising course instructor and Lab Manager, prepare laboratory media and course materials including setting up and cleaning up lab materials and equipment, grade papers as well as in-class activities including proctor exams, work with students in laboratory or lecture exercises and answer students' questions, and preparing and delivering lectures or lab presentations.

International students are required to complete [ITA (Institute for International Teaching Assistants)](#) unless they earned a degree from an U.S. university or college.

Holidays and Leave

Graduate assistantships are eligible for all University staff holidays (e.g., New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas). Undergraduate student holidays and semester breaks are not graduate student holidays.

The University does not offer vacation benefits for graduate assistantships. All vacations and leave must be planned in advance and approval obtained from the student's work advisor.

Benefits

Eligibility
- The assistantship appointment must be continuous for 4 full months (or at least 120 days) within the semester.
- Graduate assistants must be admitted to a degree program and be registered full-time of at least 9 credit hours (maximum 12) or have full-term certification for the duration of their appointment.
- Graduate assistantships are annually renewable based on satisfactory performance.

Stipend
Graduate assistantships include a 12-month stipend, paid out in twelve monthly payments.

Tuition
Graduate assistants are eligible for tuition remission of up to 12 hours per semester work during the academic semesters plus 6-12 hours during the summer.

Student Health Insurance
Graduate assistantships include basic individual [student health insurance](#) coverage at reduced cost to the student. The University covers 79% of the student health insurance premium. The student health insurance plan covers accidents and illnesses to a maximum of $250,000 per policy year.

Graduate assistants and international students will be automatically enrolled and billed for the University's health insurance each semester. International students with "F" or "J" visas registered for classes at UNL are always required to have health insurance coverage unless proof of insurance from an outside source is provided.

Once the Office of Student Accounts has generated your semester bill, you must accept, opt out, or waive health insurance coverage. This must be done every semester. Even though you are auto-enrolled, you still need to accept the insurance to complete the process and obtain your insurance cards for use at pharmacies and healthcare providers. Instructions to accept, opt out, or waive coverage can be found at https://studentaccounts.unl.edu/student-health-insurance.

Student Fees
Graduate assistants are responsible for [ALL student fees](#) (approximately $1,200 per semester) plus the student portion (approximately $500 per semester) of the University health insurance premium. The fee amount will vary depending on which courses are taken. Student fees include access to the UNL library, campus recreation and student health center.

Tax Information

Graduate assistantship stipends are taxable income.

Graduate assistants are not required to register for courses during the summer term. However, if you are employed in the summer but not registered for courses, you will be subject to FICA and Medicare taxes (currently 7.65% of your salary). To be exempt from FICA and Medicare withholding, graduate assistants must be enrolled for at least 4 or more credit hours or have full-time certification in each academic semester, including summer.

[UNL Payroll Tax Withholding](#)
[Free Tax Returns Preparation Assistance](#)

Resignation or Termination

- If a graduate assistant decides to resign from the assistantship, they must give a 30 days' written notice.
- If a graduate assistantship is terminated, the graduate assistant will receive a 30 days' written notice.

If a student resigns or the assistantship is terminated from the assistantship before completing four full months (or 120 continuous days) of employment in the semester, all tuition and health benefits will be forfeited. The student will be held responsible for the entire cost of those benefits, retroactive to the beginning of the semester, which will post to their student account.

Fellowships and Travel Grants

Fellowships

- Department of Food Science and Technology
  - Victor W. Henningsen, Sr. Graduate Student Fellowship
  - Twila Herman Claybaugh Graduate Student Fellowship
- Agricultural Research Division Fellowships
- College of Agricultural Sciences and Natural Resources Fellowships
- Office of Graduate Studies Fellowships

Travel Grants

- IANR Larrick Graduate Student Travel Grant
- Graduate Student Assembly Travel Award
- Office of Graduate Studies Travel Grant

Outside UNL Fellowships

- Office of Research and Economic Development Funding Opportunities
- Grants.gov
- NSF Graduate Research Fellowship Program (GRFP)
- NIH Predoctoral Training
- USDA Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship Grants Program (NNF)
- USDA-FSIS Graduate Student Food Safety Fellowship
- FARR Fellow (Future Leaders for Food and Agriculture)

Graduate Student Office Space and Mailboxes

Office Space

Graduate students enrolled full-time may be provided with a desk and office area. It is necessary that graduate students share an office with other graduate students and research staff. Graduate students are assigned offices based on their faculty advisor.

Graduate students are responsible for maintaining offices, laboratories, and facilities in the Department in an orderly and presentable condition at all times. Offices are not to be used for laboratory experiments or storage of equipment and/or sample materials.

Mailboxes

Each graduate student office has a designated mailbox in FIC 225.

Application for Admissions for Master or Doctoral Degree

Deadlines

Admission Term	Fall (August)	Spring (January)
Application Deadline	December 1	August 15
Application Review Period	December-January	August-September

Holistic Application Review

Because each applicant's background and experience is unique, the Department of Food Science and Technology take a comprehensive approach evaluating the applicant as a whole individual. Applicants need to follow the directions when submitting their application.

Competitive

Our program is extremely competitive. We only accept 20 students or 20% of all applicants who apply each year. Advisors and funding are limited, and not guaranteed to all applicants.

Finding a Faculty Advisor

Applicants are not automatically assigned an advisor. *After submitting their application*, applicants should begin contacting potential faculty advisors with shared research interests to discuss their background and why they are interested in working with them.

To be fully admitted, applicants must have faculty willing to accept them and serve as their faculty advisor. The Office of Graduate Studies and Department of Food Science and Technology require each prospective student to have a faculty member to serve as your advisor to be fully admitted in our graduate program. You are not admitted into the graduate program until you receive an offer of admission from the Office of Graduate Studies. If an applicant is unable to find an advisor, the applicant is denied for lack of an advisor.

Unfortunately, faculty do not notify the Graduate Program Coordinator when they are seeking students. A list of admissible students is sent to graduate faculty members every few weeks.

Successful applicants:
- Take the time and explore our faculty profiles and read their published papers
- Care deeply about a well-defined interest within one of our primary areas of research
- Only contact faculty advisors with similar research interests.

Financial Support

Graduate Assistantship

Applicants for the Master of Science Degree with Thesis and Doctoral Degree are eligible for graduate assistantships. Graduate assistants are required to work 19.6 hours per week (0.49 FTE). Graduate assistantships include a monthly stipend, tuition waiver, and 79% of the University health insurance premium. No additional forms are required to be considered for graduate assistantship. Graduate assistantships are extremely competitive. To be eligible for graduate assistantships, applicants must have a minimum GPA of 3.0 (on 4.0 scale) or B average.

Graduate assistantships are extremely competitive. Graduate assistantships are dependent on available funding and an open position in a faculty advisor's lab. Most funding come from outside funding agency grants. When a grant is approved, the faculty advisor searches for a well-qualified applicant to work on a specific research project. There is no separate application to be completed for assistantships, or list of current advisee openings or faculty with funding, as these vary according to term and faculty member.

Full-time Employees

Applicants who plan to be full-time employees are not eligible for graduate assistantships. Often full-time employees receive tuition benefits through their employers.

Governmental and Outside Funding
Examples of governmental and/ or outside funding include, but not limited to Fulbright, Chinese Scholar Council, King Saud University Scholarship or NSF Graduate Research Fellowship. Please upload the fellowship or scholarship agreement to your application.

For MS Project Only - No Financial Support
If a faculty member offers to advise an applicant without financial support and the applicant agrees to those terms, the applicant must not expect that graduate program funding will become available to the applicant at some later date. Instead, the applicant should seek to secure independent funding for the full duration of your graduate studies. Students interested in pursuing a Master of Science Degree with Project option must be willing and able to be self-funded.

Tuition and Student Fees

Graduate tuition and student fees are assessed by the credit hour and the program. Estimated expenses can be found at:
- Financial Resource Certification form
- Financial Aid Office's Estimated Cost of Attendance

Admission Requirements for Master or Doctoral Degree

Online Admission Application

The University of Nebraska-Lincoln uses an online application. If applicants do not have a CollegeNET account, they will need to "Create a New Account." Once you set up your account, you may log in to check your application status.

Revising Admission Application

You may make changes to your application and materials until you submit your application through CollegeNET. Once submitted, you may update your reference information and resend reference letter requests. If you want to update your personal statement or resume/CV, you will need to email graduate@unl.edu and make a special request.

Application Fee

All applicants must submit a nonrefundable application fee to the University before their application is processed. While we understand the economic issues around the world, the UNL Food Science and Technology Department does not waive the application fee.
- $50 – All applicants not currently enrolled at UNL
- $25 – Currently enrolled UNL students (graduate and undergraduate)

Transcripts

Applicants must upload one unofficial transcript from each college or university attended to their application. Transcripts must include the student's name, school name, courses completed, marks earned, and degrees conferred. For academic records in a language other than English, both the original-language documents and a certified word-for-word English translation must be uploaded along with certificates and diplomas. Official transcripts are required if admission is offered and accepted so newly admitted students can enroll.

Minimum Academic Requirement: 4-Year Bachelor's Degree

A four-year U.S. bachelor's degree from a regionally accredited college or university or an equivalent degree as evaluated by the Office of Graduate Studies.

The minimum requirement for admission to a University of Nebraska-Lincoln graduate program is 16 years of study. This is usually 12 years of elementary and secondary education plus four years of post-secondary study at an accredited college or university. Applicants must have reached an academic level equivalent to a U.S. bachelor's degree.

Students with only three years of post-secondary education are not eligible for admission. In such cases, students may become eligible with:

- a master's degree (or higher) from an accredited higher education institution
- an approved postgraduate diploma from an accredited higher education institution
- one additional year upper-level coursework from an accredited higher education institution

Expected Academic Background Experience

Transcripts are evaluated for course work and outstanding grades in biology, microbiology, chemistry, organic chemistry, physics, and calculus. Successful applicants have a bachelor's degree or higher degree with a background in food science, microbiology, biochemistry, engineering, nutrition, biology, chemistry, animal science or another closely related field.

To be eligible for graduate assistantships, applicants must have a minimum GPA of 3.0 (on 4.0 scale) or B average.

Professional Development Supplemental Form

Applicants are required to fill out the Professional Development Supplemental Form for their respective Master of Science or Doctoral degree application. Applicants are asked to identify their career goals, list research experience outside of the classroom and teaching experience, and identify two interests within food science and technology.

PhD Expected Research Background Experience

It is expected that applicants for the doctoral degree program have prior independent research experience outside of the classroom and submit a superior letter of recommendation from their research advisor. Applicants with a bachelor's degree or MS non-thesis or course-based degree will be competing against applicants with MS thesis or research-based degrees.

If you do not have independent academic research experience outside of the classroom, we highly encourage you to apply for the Master of Science Degree with Thesis option to gain experience and ensure original research is right for you. Once you complete your master's degree, you have the option to apply for the PhD degree.

Letters of Recommendation

Letters of recommendation provide critical information about personal attributes and student motivation. Applicants should choose three recommenders who are able to evaluate their academic and research experience, work ethic, initiative, and critical thinking skills as it relates to graduate school. Recommenders should be research advisors, faculty members, instructors, internship supervisors, or colleagues from food science and technology or closely related fields, industry, student groups, or competitions. Recommendations should never come from a family member or close friend.

Applicants may submit their admission application before receiving all the letters of recommendation. It is highly encouraged that letters be received by the deadline.

Personal Statement

In two pages or less, include a description of (1) your motivation for pursuing a graduate degree in Food Science, (2) your relevant experiences (research, teaching, internships/work, volunteering) that have prepared you for graduate school, and (3) what you want to gain during graduate school. Where appropriate, please include examples of your ability to overcome obstacles, your initiative, and communication skills. Although you do not need to identify an advisor to apply, please also indicate if there are specific faculty members you are interested in working with and why. Students interested in the Master of Science Degree-Project Option should clearly state in the personal statement that they are interested in the project option.

Resume or Curriculum Vitae

Successful applicants show their initiative outside the classroom. Be sure to include prior educational, research, teaching, internship/work, and volunteer experiences. Applicants are also encouraged to include information about awards, publications, and presentations and highlight any extra-curricular and/or leadership activities.

Publications and Awards
Applicants are not required to have publications in order to apply for our graduate program. If you do have publications, presentation abstracts or documentation of special recognitions or awards, you may upload files or provide a URL on the "Additional Information Page" of the online application. Students who have completed thesis or project papers are encouraged to upload it to their application as evidence of your previous success in critical thinking.

Only use the "Additional Information Page" of the online application to provide uploads or URLs. Do not duplicate information listed on resume/CV or documents uploaded elsewhere on the application.

GRE Standardized Test Not Required
As of November 2019, we no longer require GRE scores as part of our application.

English Proficiency Verification
Applicants whose native language is not English must submit TOEFL or IELTS test scores to demonstrate their ability to undertake advanced academic work in an English-speaking institution by providing an English Proficiency test score. Exemptions for the English proficiency requirement are granted for non-native speakers who have received a bachelor's or more advanced degree either from an accredited U.S. institution or from a university outside the U.S. at which English is the official language of instruction.

Applicants must upload a self-report to their application if they have taken an English proficiency exam, then their official scores are received by UNL Office of Graduate Studies. This is an UNL Office of Graduate Studies requirement, and they evaluate test scores and exemptions. Questions may be sent to graduate@unl.edu.

Minimum Requirements		Test scores are valid for two years.
TOEFL, internet-based	79	Send your official TOEFL score report via the TOEFL website. Institution Code 6877
IELTS (academic test)	6.5	No institution code needed, include your TRF# in your application
Duolingo	120	Accepted February 3, 2020-December 31, 2024

Application for Admissions for Food Safety and Defense Graduate Certificate

Deadlines

Admission Term	Fall (August)	Summer (May)	Spring (January)
Application Deadline	July 15	April 1	December 15

Review Process
The application review process has two steps. The Office of Graduate Studies reviews the application, followed by the Food Safety and Defense Certificate Chair. You are not admitted into the graduate certificate program until you receive an offer of admission from the Office of Graduate Studies.

Financial Support

No Financial Support
An applicant is accepted without financial support. The applicant should seek to secure independent funding for the full duration of their graduate certificate. The Food Safety and Defense Certificate is not a degree program and may not qualify for federal student aid. If you have questions, please contact the Office of Scholarships and Financial Aid.

Full-time Employees
Oftentimes, full-time employees receive tuition benefits through their employers.

Admission Requirements for Graduate Certificate

Online Admission Application

The University of Nebraska-Lincoln uses an online application. If applicants do not have a CollegeNET account, they will need to "Create a New Account." Once you set up your account, you may log in to check your application status.

Application Fee

All applicants must submit a nonrefundable application fee to the University before their application is processed. The UNL Food Science and Technology Department does not waive the application fee.
- $50 – All applicants not currently enrolled at UNL
- $25 – Currently enrolled UNL students (graduate and undergraduate)

Transcripts

Applicants must upload one unofficial transcript from each college or university attended to their application. Transcripts must include the student's name, school name, courses completed, marks earned, and degrees conferred. For academic records in a language other than English, both the original-language documents and a certified word-for-word English translation must be uploaded along with certificates and diplomas. Official transcripts are required if admission is offered and accepted so newly admitted students can enroll.

Minimum Academic Requirement: 4-Year Bachelor's Degree

A four-year U.S. bachelor's degree from a regionally accredited college or university or an equivalent degree as evaluated by the Office of Graduate Studies.

The minimum requirement for admission to a University of Nebraska-Lincoln graduate program is 16 years of study. This is usually 12 years of elementary and secondary education plus four years of post-secondary study at an accredited college or university. Applicants must have reached an academic level equivalent to a U.S. bachelor's degree.

Students with only three years of post-secondary education are not eligible for admission. In such cases, students may become eligible with:
- a master's degree (or higher) from an accredited higher education institution
- an approved postgraduate diploma from an accredited higher education institution
- one additional year upper-level coursework from an accredited higher education institution

One Letter of Recommendation

Letters of recommendation provide critical information about personal attributes and student motivation. Applicants should choose at least one recommender who are able to evaluate their experience, work ethic, initiative, and critical thinking skills.

Applicants may submit their admission application before receiving the letter of recommendation. It is highly encouraged that the letter be received within two weeks of the deadline.

Personal Statement

The personal statement should consist of 1 page and include your professional goals and how enrolling in this program will assist you in meeting your professional goals.

Resume or Curriculum Vitae

Successful applicants show their initiative outside the classroom. Be sure to include prior educational, research, teaching, internship/work, and volunteer experiences. Applicants are also encouraged to include information about awards, publications, and presentations and highlight any extra-curricular and/or leadership activities.

English Proficiency Verification

Applicants whose native language is not English must submit TOEFL or IELTS test scores to demonstrate their ability to undertake advanced academic work in an English-speaking institution by providing an English Proficiency test score. Exemptions for the English proficiency requirement are granted for non-native speakers who have received a bachelor's or an advanced degree either from an accredited U.S. institution or from a university outside the U.S. at which English is the official language of instruction.

Applicants must upload a self-report to their application if they have taken an English proficiency exam, then their official scores are received by UNL Office of Graduate Studies.

Minimum Requirements		*Test scores are valid for two years.*
TOEFL, internet-based	79	Send your official TOEFL score report via the TOEFL website. Institution Code 6877
IELTS (academic test)	6.5	No institution code needed, include your TRF# in your application
Duolingo	120	Accepted February 3, 2020-December 31, 2024

Graduate Education Oversight

College of Agricultural Sciences and Natural Resources Strategic Framework

The Strategic Framework for Graduate Education was written to determine the vision for the IANR graduate education, push the boundaries of traditional academic education, and provide students with an educational experience that prepares them to be the next generation of leaders, scientists, educators, innovators, and entrepreneurs.

Vision Statement
- Every graduate student is inspired and empowered to make a difference in a complex and diverse world

Goals
1. Individualized student experience for personal goals and professional growth of our graduate students
2. Holistic approach that Integrates curriculum, research and discovery, experiential learning, and professional development that prepares students to pursue opportunities and solve challenges In Nebraska and beyond
3. Diverse experiences with and beyond the university community that develop global and inclusive mindset/perspective

Departmental Graduate Committee

The mission of the Food Science and Technology Graduate Committee is to develop and maintain excellence in the departmental graduate program.

Membership and Selection
- Consists of five Food Science and Technology graduate faculty members appointed by the Department Head.
- The chair of the Graduate Committee is appointed by the Dean of Graduate Studies upon the recommendation of the Department Head.

Responsibilities
- Suggest and modify graduate admissions and degree requirements for departmental graduate faculty approval
- Evaluate applications and recommend acceptance into the graduate program
- Monitor graduate student academic performance and progress
- Address academic issues and student concerns including the oversight of student appeals
- Identify and advance new curricula
- Update the FDST Graduate Handbook and website on policy and procedure changes

Chair Responsibilities
- Lead graduate committee activities
- Assure fair and consistent compliance with all Graduate College and UNL policies that govern graduate education
- Approve student paperwork, like Supervisory Committees and Plans of Study
- Assign teaching assistant experience in collaboration with the Teaching Laboratory Manager and Department Head

Faculty Advisor

Each graduate student must have at least one faculty advisor from the Department of Food Science and Technology. Students can also be co-advised by two faculty, one of whom must be from the Department of Food Science and Technology.

Faculty Advisor Responsibilities
- Advise the graduate student regarding course work and general academic requirements
- Guide and monitor the graduate student's progress throughout their program
- Serve as the chair of the student's supervisory committee
- Provides counsel to the student if problems arise during their program
- Conduct the student's mid-program Comprehensive and Final Oral examinations with supervisory committee

A faculty member has the right to decline supervision of research or project by any graduate student, regardless of the origin of the research problem.

UNL Full-time Employee Graduate Students
To reduce conflict of interest, University of Nebraska-Lincoln full-time employees must identify a Food Science and Technology faculty advisor other than their immediate University of Nebraska-Lincoln work supervisor. Their University of Nebraska-Lincoln work supervisor may serve on their supervisory committee as a committee member.

Faculty Submitting Grades for FDST 897, FDST 899, and FDST 999

Each faculty advisor has their own section of FDST 897, FDST 899, and FDST 999 and is responsible for entering grades.
- P is for Pass
- NP is for No Pass (lack of progress)
- IP is for In Progress

Office of University Registrar (OUR) Submitting Grades Guidelines and Tutorials: https://registrar.unl.edu/faculty-staff/submitting-grades/

Change of Grades

Before the Final Semester
If a faculty advisor does not enter a grade, NR (No Report) will show up on a student's transcript. The faculty may request a change of grade by emailing the Office of the University of Registrar (OUR) at registrar@unl.edu. The email request must include the student's name, student's NU ID, term, course number, course title and SIS/Course ID.

Final Semester
Students who have applied for graduation and have outstanding grades (IP or NR) for FDST 899 or FDST 999 need their final grades entered. The faculty advisor enters grades using Thesis/Dissertation Grade Change. After the faculty advisor opens the link, select the advisee's name from the dropdown menu. After choosing the advisee, the outstanding grades will appear. Enter the new grade of P and submit. You will receive a confirmation message. The grade change will be processed overnight, and an email notification will be sent to the student.

Supervisory Committee

The primary function of the Supervisory Committee is to assist the student in developing an [individualized plan](#), including academic coursework and professional development opportunities, that is compatible with the student's career goals. The Supervisory Committee also ensures the student has reached a satisfactory level of academic achievement.

Supervisory Committee Responsibilities
- Monitor the progress of the student through annual reviews
- Provide counsel to the student if problems arise during their program
- Approve the student's Plan of Study (academic coursework required to graduate)
- Conducts the mid-program Comprehensive and Final Oral examinations

Graduate Faculty Status

Faculty must have [Graduate Faculty status](#) to work with graduate students. Faculty holding tenure-track positions are automatically appointed as Graduate Faculty at the time of hire. Faculty members in non-tenure leading positions, including professors of practice, research professors, and adjunct faculty, must be nominated for appointment to the Graduate Faculty.

Graduate Faculty Status (full)
Graduate Faculty may teach graduate courses, serve on final examining committees, and serve on supervisory committees for both master and doctoral students. They may vote on any matter presented to the Graduate Faculty. Graduate Faculty status lasts for the duration of the faculty member's appointment with the University.

Graduate Faculty Associate Status
Graduate Faculty Associates may teach graduate courses, direct masters theses, serve on or chair masters examining committees, and serve on doctoral supervisory committees for a four year term. Associate appointments may be renewed for additional terms(s) of four years.

Emeriti Graduate Faculty Status
Upon the recommendation of the departmental/school or interdepartmental Graduate Committee retired Graduate Faculty who have been appointed to emeritus status may retain the rights and privileges associated with their status as Graduate Faculty. These rights and privileges include permission to teach graduate courses, to serve as members of graduate programs, or to co-chair the supervisory committees of doctoral students with a resident Graduate Faculty member.

Adjunct Graduate Faculty Status
Upon recommendation of the departmental/school or interdepartmental
Graduate Committee, Adjunct Faculty previously holding Graduate Faculty status while employed by the University of Nebraska, may retain certain rights and privileges intended to aid in successful degree completion of University of Nebraska students previously under their formal mentorship for a four year term. Adjunct appointments may be renewed for additional terms(s) of four years. Adjunct Faculty have no campus wide or Graduate College voting privileges outside their supervisory committee work.

Graduate Lecturers
Graduate Lecturers are non-tenure track faculty who are nominated and appointed to serve in a limited capacity. Graduate Lecturers may teach graduate courses, serve as academic advisors, and supervise students in graduate-level courses related to professional training such as clinical, field experience, practicum, internship and laboratory courses.

Graduate Faculty Departmental Participation
Graduate faculty are highly encouraged to be actively engaged in graduate education and program development.

Examples include:

Fall Department of Food Science and Technology Seminar Series
- Present a seminar
- Invite and host an outside speaker
- Regularly attend seminar

Spring Food Science and Technology Research Symposium
- Mentor trainees in the development of their presentations
- Serve as an events judge
- Attend and support student presentations

Teach
- Teach or co-teach graduate-level FDST courses

Research
- Advise and mentor Food Science and Technology master or doctoral students
- Serve on supervisory committees for Food Science and Technology master or doctoral students
- Contribute to writing a successful grant to support a Food Science and Technology graduate student

Governance
- Regularly attend Food Science and Technology faculty meetings and vote on graduate program issues
- Serve on the Food Science and Technology Graduate Program Committee
- Serve on the UNL Graduate Council