Food Science

The department’s professional activities include teaching, research, and extension functions. The program provides an educational, research, and informational center in food science for North Carolina and the nation. The department also houses two research centers, the Southeast Dairy Foods Research Center and the Center for Advanced Processing and Packaging Studies. Course offerings and research opportunities are available in the following areas: chemistry-biochemistry, engineering, microbiology, nutrition and processing technology. The strategic directions of the faculty and staff are in the areas of: food safety and foodborne disease prevention; food manufacturing and entrepreneurship; instructional innovation and effectiveness; and, foods for health and well-being.

Degrees earned will be distributed as: “Master of Food Science”, “Master of Science”, and “Doctor of Philosophy” without research area specifications.

Admissions Requirements

To be admitted, a student should be a graduate of an accredited program in food science or the equivalent. Graduates of other majors can be admitted but will have additional course requirements. The best qualified applicants will be accepted up to the number of spaces that are available for new students. We only recommend admission to the M.S. or Ph.D. degree if a member of our research faculty is willing to advise the student’s research. Applications from qualified candidates will be reviewed by faculty seeking research students; conversely applicants may contact faculty whose research specialty is of interest to inquire about available positions. Admission to the Master of Food Science will be based on the qualifications of the applicants.

Master’s Degree Requirements

A Master’s program must include courses from at least two of the following categories: chemistry-biochemistry, engineering, microbiology, nutrition and processing technology. The M. S. in Food Science requires 30 credit hours of course work and research. The Master of Food Science requires 36 credit hours of course work, including an independent project and professional skills.

Doctoral Degree Requirements

A doctoral program must include courses from at least three of the categories listed above (or equivalent courses at another university). Total course credits will vary depending on the needs of the student and the requirements of the Graduate School. All doctoral students are required to pass a departmentally administered written preliminary exam, designed to evaluate a Ph.D. student's general knowledge and comprehension of food science.

Student Financial Support

Graduate assistantships and other forms of student aid available to students in this program are described elsewhere in the Graduate Catalog. Admission does not guarantee availability of financial support.

Other Relevant Information

Students are encouraged to make personal contact with individual faculty whose research program is of interest to them.

Degrees

- Food Science (MR) (http://catalog.ncsu.edu/graduate/agriculture-life-sciences/food-science/food-science-mr/)
- Food Science (MS) (http://catalog.ncsu.edu/graduate/agriculture-life-sciences/food-science/food-science-ms/)
- Food Science (PhD) (http://catalog.ncsu.edu/graduate/agriculture-life-sciences/food-science/food-science-phd/)
- Food Science (Minor) (http://catalog.ncsu.edu/graduate/agriculture-life-sciences/food-science/food-science-minor/)

Faculty

Full Professors

Jonathan C. Allen, Professor, Director of Food Science Graduate Program
Kenneth E. Anderson
Rodolphe Barrangou, Todd R. Klaenhammer Distinguished Professor
Frederick Breidt, USDA/ARS Microbiologist and Professor
Benjamin James Chapman
Patricia Ann Curtis
Lisa Louise Dean, USDA Professor
Mary Anne Drake, William Neal Reynolds Distinguished Professor
Mario Giovanni Ferruzzi, David H. Murdock Distinguished Professor
Scott A. Hale
Hosni Moustafa Hassan
Lee-Ann Jaykus
Sophia Kathariou, Professor
Saad A. Khan
Duane K. Larick
Mary Ann Lila, Professor, Food Bioprocessing & Nutrition Sciences and Director, Plants for Human Health Institute
Richard Linton
Muquarrab Qureshi, Research Leader, Food Science Research Unit, Agricultural Research Service, USDA
K. P. Sandeep, Department Head, Professor
John Douglas Sheppard, Professor, Bioprocessing Science Undergraduate Coordinator

Associate Professors

April Fogleman, Associate Professor and Extension Specialist
Lora Suzanne Goodell, Associate Professor, Director of Interdepartmental Graduate Program in Nutrition
Assistant Professors

Alexander Vladimirovich Chouljenko, Assistant Professor
Area of Research: Seafood Science

Natalie Kathleen Cooke, Assistant Professor, Director of Undergraduate Programs for Nutrition Science

Lynette Marie Johnston, Assistant Professor and Food Safety Extension Specialist

Marvin Leonel Moncada Reyes, Assistant Professor

Deepti Arvind Salvi, Assistant Professor
Area of Research: Food Engineering

Ondulla Tyvette Toomer, USDA Assistant Professor

Haotian Zheng, Assistant Professor
Area of Research: Food Chemistry

Practice/Research/Teaching Professors

Josip Simunovic, Research Professor

Fernanda Bottaro de Oliveira Santos

Nicola Singletary, Assistant Teaching Professor

Emeritus Faculty

Sarah Liberman Ash

Leonard W. Aurand

Hershel R. Ball Jr

Leon Carl Boyd

Roy E. Carawan

Daniel E Carroll Jr

George L. Catignani

Edward Allen Foegeding

David Patrick Green

Max E. Gregory

Victor A. Jones

Todd Robert Klaenhammer

Carolyn Jean Lackey

Tyre C. Lanier

Roger Floyd McFeeters

James Leslie Oblinger

John Eual Rushing

Timothy H. Sanders

Steven J. Schwartz

Brian W. Sheldon

Harold E. Swaisgood

Kenneth R. Swartzel

Van-Den Truong

Lynn G. Turner

William M. Walter

Donn R. Ward

Adjunct Professors

William Ronald Aimutis Jr.

Alejandro Amezquita

Pablo Marcelo Coronel

Christopher R. Daubert

Jack Parker Davis

Brian E. Farkas

Katherine Patterson Maloney

Tawanda Muzhingi

Shengmin Sang

Ratna Rani Sharma

Richard C. Theuer