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
Dana J. Hanson, Associate Professor, Extension Specialist, Meat Science
Gabriel Keith Harris, Associate Professor, Director of Undergraduate Programs for Food Science
Suzanne Dunn Johanningsmeier, Research Food Technologist & USDA Assistant Professor
Colin David Kay, Associate Professor
Slavko Komarnytsky, Associate Professor
Andrew Peter Neilson, Associate Professor
Area of Research: Microbiome
Ilenys Muniz Perez-Diaz, USDA-ARS Associate Professor
Area of Research: Microbiology
Clinton Dale Stevenson, Associate Professor and Distance Education Coordinator

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