FOOD SCIENCE • Masters, PhD

Our faculty and staff are strategically aligned with:

• Food Safety and Foodborne Disease Prevention
• Food Manufacturing and Entrepreneurship
• Health and Well-being
• Education Innovation and Effectiveness

Masters (non-thesis): Develops skills to communicate core product and quality concepts in industry settings.

Masters (thesis): Prepares analytical communicators for academic or industry settings. Courses cover chemistry, engineering, microbiology, processing, nutrition, and sensory analysis. Post-graduate opportunities range from technical research positions to pursuing a PhD.

PhD: For those who want in-depth research experience

Research areas:
• Diet, health, and disease prevention
• Fermentation, probiotics, and human health
• Flavor chemistry and sensory science of dairy products
• Food ingredient functionality
• Quality and safety of fruits, vegetables, meats, seafood
• Thermal and non-thermal processing of foods
• Viral and foodborne bacterial pathogens

Career Possibilities:
• Flavor or sensory scientist
• Food chemist or engineer
• Food processing specialist
• Food product developer
• Food safety compliance officer
• Microbial analyst
• Nutritional quality or labeling specialist
• Teaching, research, or extension specialist

Director, Dr. Jon Allen, jallen@ncsu.edu
Student Support, Ms. Juliebeth Briseno

NUTRITION • Masters, PhD

An interdepartmental program with faculty from:

• Agricultural and Human Sciences
• Animal Science
• Food, Bioprocessing and Nutrition Sciences
• Horticultural Science
• Molecular and Structural Biochemistry
• Prestage Department of Poultry Science

Masters (non-thesis, online option): Develops skills for jobs in public health, wellness, and food and pharmaceutical industries. Students choose an emphasis in:

• Feed Science
• Human Nutrition
• Professional Science Master of Nutrition (Feed Science or Human Nutrition)

Masters (thesis): For those seeking nutrition experience to obtain a technical research position or work toward a PhD.

PhD: An immersive program that includes biological, physical, and social sciences. Research areas:

• Community nutrition
• Metabolomics
• Phytochemicals and gut microbiome interaction
• Role of diet and nutrition in disease prevention

Career Possibilities:
• Community health advisor or educator
• Consultant for non-profit or government agencies
• Research coordinator
• Policy analyst
• Program manager
• Teaching, research, or extension specialist

Director, Dr. Suzie Goodell, lsgoodel@ncsu.edu
Student Support, Ms. Pam Van Emden
FOOD SCIENCE • BS

Understand production of safe, sustainable, nutritious, delicious foods for local and global markets through the application of chemistry, microbiology, and engineering.

Science Emphasis: Prepares students for grad school or careers in industry and academia.

Technology Emphasis: Coursework that combines science and business to prepare students for food-related entrepreneurial opportunities.

Food Science Minor: Provides a competitive edge for employment in food, pharmaceutical, and related industries.

Food Science Club: Student group with an emphasis on industry networking opportunities.

Institute of Food Technologists: Global community of industry professionals who advance the business and science of food.

Career Possibilities:
- Food or flavor chemist
- Food microbiologist
- Food packaging or processing specialist
- Food product development scientist
- Food safety officer
- Quality assurance specialist
- Sensory scientist

Director, Dr. Keith Harris, gkharris@ncsu.edu
Advisor and Student Support, Ms. April Morrison

BIOPROCESSING SCIENCE • BS

Understand how to develop and produce fermented foods, biofuels, and healthcare products. Combines biochemistry, microbiology, and molecular biology with hands-on experience with fermenters, bioreactors, and analytical equipment.

Brewing Science and Technology Minor: Prepares students for a career in the brewing industry. Hands-on experience in the Wolfpack Brewing Lab.

International Society for Pharmaceutical Engineering: Global organization to advance pharmaceutical manufacturing professionals.

Biomanufacturing Training and Education Center: Cross-disciplinary center to develop skilled biomanufacturing professionals.

Career Possibilities:
- Fermentation scientist
- Lab analyst, manager, or technologist
- Manufacturing technician
- Process development associate or technician
- Quality assurance specialist
- Quality control analyst
- Validation associate

Director, Dr. John Sheppard, jdsheppa@ncsu.edu
Advisor and Student Support, Ms. April Morrison

NUTRITION SCIENCE • BS

Understand how nutrients and food affect individuals, families, and communities. Combines chemistry, biology, microbiology, genetics, and psychology.

Nutrition Science: Fulfills prerequisites for medical, dental, pharmacy, optometry, physical therapy, and other health professional programs.

Applied Nutrition: Fulfills prerequisites for physician assistant, nursing, dietitian, public health, and occupational therapy graduate and professional programs.

Nutrition Minor: Assists with pursuing careers in healthcare, food industry, or as a health science educator. Students choose an emphasis in human nutrition, animal nutrition, or both.

Career Possibilities:
- Clinical research coordinator
- Community nutritionist
- Extension educator
- Federal nutrition program analyst
- Lactation consultant
- Medical professional
- Project manager or coordinator
- Research technician
- Wellness health coach

Director, Dr. Natalie Cooke, nkcooke@ncsu.edu
Advising and Student Support, Ms. April Morrison, Dr. Sarah Ash, Dr. Nicola Singletary, Ms. Pam Van Emden