# **Master of Science – Food and Nutritional Sciences**

# Department of Family and Consumer Sciences Effective 2019-2020

## **Program Coordinator:**

Dr. Heather Colleran, hcolleran@ncat.edu, (336) 285-3627

### **Admission Requirements**

- Unconditional admission requires an earned baccalaureate degree in food and nutrition or related field from an accredited institution and a GPA of 2.8 or better
- Conditional admission:
  - Graduate coursework in Food and Nutritional Sciences at NC A&T SU requires a background in food science, nutritional science and chemistry. Students with science deficiencies should complete these courses prior to admission into the program in order to be competitive for admission. The Food and Nutritional Sciences Graduate Faculty recruits and admits students from a number of scientific disciplines. Applicants needing to strengthen their background in Food and Nutritional Sciences must complete up to three of these prerequisites during their first year of the graduate program.
    - o FCS 157: Introduction to Human Nutrition
    - FCS 245: Introduction to Food Science
    - o CHEM 251: Elementary Biochemistry and biochemistry laboratory (CHEM 255)

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CORE BLOCK— (17.0 hrs)	C 1º4	TD /C 1
Course Prefix, Number, and Title	Credits	Term/Grade
FCS 789: Graduate Seminar (Fall only)	1.0	
FCS 711: Research Design and Methodology (Fall only)	3.0	
ABM 705: Statistical Methods (Fall only)	3.0	
FCS 735: Experimental Foods (Fall only)	4.0	
CHEM 651: General Biochemistry (Spring only)	3.0	
FCS 730: Nutrition and Disease (Spring only)	3.0	
Food Science Concentration (6.0 hrs)		
Course Prefix, Number, and Title	Credits	Term/Grade
FCS Food Science Concentration Elective	3.0	
FCS Food Science Concentration Elective	3.0	
<b>Nutritional Science Concentration (6.0 hrs)</b>		
Course Prefix, Number, and Title	Credits	Term/Grade
FCS Nutritional Science Concentration Elective	3.0	
FCS Nutritional Science Concentration Elective	3.0	
COMPREHENSIVE EXAM (0.0 hrs)		
Course Prefix, Number, and Title	Credits	Term/Grade
Comprehensive Exam (final semester)	0.0	
THESIS OPTION (7.0 hrs) and Defense		
Course Prefix, Number, and Title	Credits	Term/Grade
FCS 797: Thesis research (second to last semester)	6.0	
FCS 999: Con't of Thesis for FCS	1.0	
NON-THESIS OPTION Practicum (7.0 hrs)		
Course Prefix, Number, and Title	Credits	Term/Grade
FCS 784: Practicum (final semester)	3.0	
FCS or approved electives related to food and nutritional sciences or research	4.0	
TOTAL PROGRAM CREDIT HOURS	30.0	

Food Science Concentration Electives	
Course Prefix, Number, and Title	Credits
FCS 618: Food Technology Seminar	1.0
FCS 641: Food Protection and Defense	4.0
FCS 645: Risk Assessment in the Food Industry	3.0
FCS 693: Advanced Sensory Evaluation of Foods	3.0
FCS 694: Advanced Food Chemistry	3.0
FCS 695: Advanced Food Analysis	3.0
FCS 696: Advanced Food Preservation	4.0
FCS 697 Advanced Food Microbiology and Biotechnology	3.0
FCS 741: Food and Nutritional Toxicology	3.0
<b>Nutritional Science Concentration Electives</b>	
Course Prefix, Number, and Title	Credits
FCS 640: Geriatric Nutrition	3.0
FCS 650: International Nutrition	3.0
FCS 692: Advanced Nutrition Assessment	3.0
FCS 698: Advanced Nutrition Education	3.0
FCS 699: Advanced Community Nutrition	3.0
FCS 715: Trace Elements and Nutrition	3.0
FCS 733: Nutrition During Growth and Development	3.0
FCS 742: Cultural Anthropology	3.0
FCS 749: Topics in Nutrition and Health Promotion	3.0
Additional Electives – Prior Approval Required	
Course Prefix, Number, and Title	Credits
FCS 603: Special Problems in Family and Consumer Sciences	3.0
FCS 635: Introduction to Research Methods Food and Nutritional Sciences	3.0
FCS 637: Special Problems in Food and Nutritional Sciences or Food Science	3.0
FCS 744: Seminar in Food and Nutrition	2.0
FCS 769: Special Topics	3.0

#### **Degree Information**

The Master of Science in Food and Nutritional Sciences is designed to develop the basic knowledge and skill necessary to undertake research in Food and Nutritional Sciences and other related areas. It also develops competencies to work as food and nutrition specialists in education, or other community nutrition agencies and food industries. The program also develops theoretical and experimental competencies necessary to pursue additional graduate studies or obtain professional degrees.

Graduate students may enroll in a maximum of 12 credit hours per semester.

#### Program Outcomes:

- 1. Upon completion of their coursework, students will accurately communicate in writing their knowledge of advanced concepts and principles related to food and nutritional sciences.
- 2. Upon completion of their coursework, students will effectively express in an oral presentation their knowledge of food and nutritional sciences concepts, principles and trends.
- 3. Upon completion of their coursework, students will read and analyze scholarly literature in food and nutritional sciences for accuracy of research techniques and contributions to the discipline.
- 4. Upon completion of the thesis option, students will develop research questions, hypotheses and research methodology to address a problem in the field of food and nutritional sciences.
- 5. Upon completion of the program, students will identify and apply appropriate theories to address food and nutrition related issues impacting society.