

# Food Systems and Technology

## Introduction

The Food Systems and Technology program prepares graduates for careers in the nation's largest business-the food industry. The Food Systems and Management concentration prepares graduates to administer large quantity food production and service facilities everywhere, from cruise ships to hospitals, schools and prisons. Graduates may also manage catering operations or restaurants and delis. Entry-level positions for graduates of the Food Science concentration include assistant food scientist, quality assurance manager, food analyst, food/ingredient development team member, technical representative and government relations officer. The Food Merchandising and Distribution concentration prepares graduates for positions such as supermarket, convenience store or food discount club management; manufacturer sales; food broker; specialty food merchandising; and marketing specialist. The Food Communication concentration prepares graduates for a variety of careers including food styling, magazine or newspaper writing and editing, food and nutrition television reporter, food promotion specialist or food industry home economist. The Food Packaging concentration prepares graduates for a variety of careers in the food packaging industry including design and management as it relates and impacts the food item.

## General Requirements

### Bachelor of Science Degree

Total for graduation.....	126 credits
General Education .....	42 credits
Major Studies .....	42 credits
Concentration.....	42-48 credits

Work experience must be obtained through participation in the Field Experience program (after junior year).

All transfer credits must have a grade point of 2.0 or better. A 2.25 or better grade point average is required for graduation. All major studies courses must have a 1.67 or better grade point average.

## Program Requirements

### General Education

42 credits required

#### A. Communication Skills 8 credits

ENGL-101 Freshman English – Composition or	
ENGL-111 Freshman English – Honors I.....	3
ENGL-102 Freshman English – Reading and Related Writing or	
ENGL-112 Freshman English – Honors II.....	3
SPCOM-100 Fundamentals of Speech.....	2

#### B. Analytic Reasoning 6 credits

MATH-120 Introductory College Mathematics I or	
MATH-154 Calculus II .....	4
<i>Remaining courses must be from the areas including math, logic, statistics and computer science.</i>	

#### C. Health and Physical Education 2 credits

*Courses must be from areas of health, physical education or nutrition.*

#### D. Humanities and the Arts 9 credits

*Courses must be from three or more areas including art history, creative arts, foreign language and culture, history, literature, music appreciation, performing arts and philosophy.*

#### E. Social and Behavioral Sciences 9 credits

ECON-210 Principles of Economics I (recommended) .....	3
<i>Courses must be from three areas including anthropology, economics, geography, political science, psychology and sociology.</i>	

#### F. Natural Sciences (with Lab) 4 credits

BIO-234 Physiology and Anatomy .....	4
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#### G. Technology 2 credits

FN-222 Food Technology (recommended).....	2
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#### H. General Education Electives 2 credits

*Required courses from the major studies component will fulfill these requirements.*

### Major Studies

42 credits

BIO-306 General Microbiology .....	4
INMGT-400 Organizational Leadership .....	3
BUMKT-330 Principles of Marketing.....	3
EDUC-307 Applied Human Relations.....	2
FN-111 Food Systems and Technology Futures .....	1
FN-124 Foods or	
FN-240 Food Science .....	4
FN-208 Management of Food Production .....	3
FN-212 Nutrition .....	2-3
FN-442 Basic Sensory Analysis .....	3
FN-449 Cooperative Education/Internship or	
FN-497 Field Experience .....	2
FN-XXX Senior Project .....	1-4
PKG-150 Packaging Fundamentals.....	2

Select 2 credits from the following:

ENGL-415 Technical Writing or	
SPCOM-308 Speech Skills for Business and Industry.....	2

Select 5 credits from the following:

CHEM-115 General Chemistry or	
CHEM-125 Principles of Chemistry for Health Sciences or	
CHEM-135 College Chemistry I .....	5

Select up to 4 credits of Major Studies Electives

XXX-XX Electives.....	0-4
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## Concentrations

43 credits required

### Food Systems Management 43 credits

BUACT-206	Introduction to Financial Accounting	3
BUACT-207	Introduction - Corporate and Managerial Accounting	3
BUMGT-304	Principles of Management	3
FN-260	Menu Planning and Design	2
FN-310	Lifespan Nutrition	3
FN-420	Food Styling	3
HT-324	Quantity Food Production	4
HT-362	Food, Beverage and Labor Cost Controls	3
HT-353	Computer Systems for Food Service	2
HT-450	Food Service Administration	3
HT-323	Food Service Equipment	2
XXX-XXX	Electives *	6

#### Take two of the following courses:

FN-410	Food Policy Regulation and Law	3
FN-414	Catering or	
HT-424	Catering	3
FN-461	Multicultural Aspects of Food and Nutrition Patterns	3

\* *BIO-206 Food Service and Environmental Sanitation (1 credit) may give students sanitation certification from the Educational Foundation of the National Restaurant Association.*

\* *ECON-215 Principles of Economics II and declaration on application may give students a Business Administration minor.*

### Food Science 48 Credits

INMGT-200	Production/Operations Management	3
INMGT-320	Quality Tools	3
FN-342	Advanced Foods	3
FN-350	Food Processing	3
FN-410	Food Policy Regulation and Law	3
FN-438	Experimental Foods	3
FN-450	Food Engineering	3
BIO-406	Food Microbiology	3
CHEM-201	Organic Chemistry I	4
CHEM-311	Biochemistry	4
CHEM-315	Food Chemistry	3
CHEM-335	Instrumental Methods of Analysis	3
STAT-320	Statistical Methods	3
MATH-153	Calculus I or	
MATH-156	Calculus and Analytic Geometry	4
PHYS-211	Introduction to Physics	3

### Food Merchandising and Distribution 44 Credits

BUACT-206	Introduction to Financial Accounting	3
BUMKG-334	Salesmanship and Sales Management or	
BURTL-229	Visual Merchandising	3
BUMKG-370	Principles of Advertising or	
BURTL-425	Current Retail Strategies for a Differential Advantage	2
BUMKG-438	Industrial Distribution	3
FN-225	Special Topics in Food and Nutrition	1-2
FN-202	Food and Beverage Distribution Industry	3
FN-470	Food Distribution Operations and Control	3
FN-410	Food Policy Regulation and Law	3
FN-420	Food Styling	3
FN-438	Experimental Foods	3
HT-324	Quantity Food Production	4
HT-450	Food Service Administration	3
HT-323	Food Service Equipment	2

PSYC-377	Consumer Psychology	3
XXX-XXX	Electives	2

#### Select 3 credits from the following:

BUMGT-480	Entrepreneurship: Small Business Planning or	
BURTL-431	Service Management Strategies or	
HT-362	Food, Beverage and Labor Cost Controls or	
ECON-215	Principles of Economics II	3

### Food Communication 42 Credits

MEDIA-304	Elementary Photography	3
GCM-141	Graphic Communications and Electronic Publishing	3
GCM-345	Publications Production	3
BUMKG-334	Salesmanship and Sales Management	3
BUMKG-370	Principles of Advertising	3
BUMKG-479	Marketing Research	3
FN-260	Menu Planning and Design	2
FN-310	Lifespan Nutrition	3
FN-325	Recipe Development and Cookbook Writing	1
FN-414	Catering or	
HT-424	Catering	3
FN-420	Food Styling	3
FN-438	Experimental Foods	3
FN-461	Multicultural Aspects of Food and Nutrition Patterns	3
ENGL-XXX	Any Journalism	2-3

#### Select 2-3 credits from the following:

FN-342	Advanced Foods	3
FN-410	Food Policy and Law	3
FN-XXX	Any Food and Nutrition	2-3

#### Select 2-3 credits from the following:

MEDIA-XXX	Any Media Technology	2-3
GCM-XXX	Any Graphic Communications	2-3
BUXXX-XXX	Any Business Administration	2-3
ART-XXX	Any Art	2-3
ENGL-XXX	Any English or Journalism	2-3

### Food Packaging 42 credits

BIO-406	Food Microbiology	3
CHEM-201	Organic Chemistry I	4
CHEM-315	Food Chemistry	3
FN-XXX	Quality Foods	3
FN-325	Food Packaging	3
FN-410	Food Policy Regulation and Law	3
FN-450	Food Engineering	3
MATH-154	Calculus II	4
PKG-XXX	Food Packaging Lab	3
PKG-200	Packaging Materials	3
PKG-250	Consumer Packaging Systems	3
PKG-335	Packaging Machinery	3
PKG-350	Packaging Design and Evaluation	2
STAT-130	Elementary Statistics	2