FOOD SYSTEMS INDUSTRY MANAGEMENT - BS

The Bachelor of Science in Food Systems Industry Management is a program that focuses on the application of chemical, physical, and engineering principles to the development and implementation of manufacturing, packaging, storage, and distribution technologies and processes for food products. This includes instruction in food engineering, food preservation and handling, food preparation, food packaging and display, food storage and shipment, and related equipment and facilities design, operation and maintenance. The program capitalizes on the food system supply chain from the post-harvest to table perspective. It is a unique and integrated Science, Technology, Engineering, and Mathematics degree program with an interdisciplinary approach with equal input from Agricultural Systems Management, Food Science and Technology, and Agricultural Economics. Students will be prepared in four core competency domains and participate in high-impact experiences to integrate knowledge across discipline areas: (a) operate and manage food processing, storage, and distribution systems; (b) perform systems analysis and management of food processing, storage, and distribution systems; (c) perform economic analyses on food processing, storage, and distribution systems; and (d) effectively manage and utilize large databases and information systems. Students can choose directed electives in specialize areas and will complete two capstone experiences and an off-site internship as part of the degree requirements. For more information, visit [https://foodscience.tamu.edu](https://foodscience.tamu.edu).

Program Requirements

### First Year

#### Fall

- **AGEC 105** Introduction to Agricultural Economics 3
- **CHEM 119** Fundamentals of Chemistry I 4
- **ENGL 104** Composition and Rhetoric or **ENGL 103** Introduction to Rhetoric and Composition 3
- **FSTC 201** Food Science 3
- **FSTC 210** Horizons in Nutrition and Food Science 2

**Semester Credit Hours** 15

#### Spring

- **ECON 202** Principles of Economics or **ECON 203** Principles of Economics 3
- **ENGL 210** Technical and Professional Writing 3
- **HIST 105** History of the United States 1 3
- **MATH 140** Mathematics for Business and Social Sciences 3
- **PHYS 201** College Physics 4

**Semester Credit Hours** 15

### Second Year

#### Fall

- **ACCT 209** Survey of Accounting Principles or **ACCT 229** Introductory Accounting 3
- **AGSM 301** Systems Analysis in Agriculture 3
- **HIST 106** History of the United States 3
- **MATH 142** Business Calculus 3
- **POLS 206** American National Government 3

**Semester Credit Hours** 15

#### Spring

- **CHEM 120** Fundamentals of Chemistry II or **PHYS 202** College Physics 4
- **POLS 207** State and Local Government 3
- **Select one of the following:** 3
  - **STAT 301** Introduction to Biometry
  - **STAT 302** Statistical Methods
  - **STAT 303** Statistical Methods
- **Language, philosophy and culture** ([http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture](http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture)) 3

**Semester Credit Hours** 13

### Third Year

#### Fall

- **AGEC 340** Agribusiness Management 3
- **AGSM 473** Project Management for Agricultural Systems Technology 3
- **ANSC 326/ FSTC 326** Food Bacteriology and Food Bacteriology Lab 4
- **AGSM 360** Occupational Safety Management 3
- **Technical elective** 1 3

**Semester Credit Hours** 16

#### Spring

- **AGEC 314** Marketing Agricultural and Food Products 3
- **AGEC 330** Financial Management in Agriculture 3
- **AGSM 315/ FSTC 315** Food Process Engineering Technology 3
- **AGSM 440** Management of Agricultural Systems II 3
- **Creative arts** ([http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts](http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts)) 3

**Semester Credit Hours** 15

### Fourth Year

#### Fall

- **AGEC 453** International Agribusiness Marketing 3
- **AGSM 439** Management of Agricultural Systems I 3
- **ANSC 470/ FSTC 470** Quality Assurance for the Food Industry 3
- **FSTC 324** Food Safety and Preventive Controls for Human Food 3
- **FSTC 485** Directed Studies or Research 3

**Semester Credit Hours** 15

#### Spring

- **AGSM 440** Management of Agricultural Systems II 3
- **Creative arts** ([http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts](http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts)) 3

**Semester Credit Hours** 15
Technical electives\(^1\)  

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\(^1\) For technical electives choose from: AGEC 422, AGEC 485, AGEC 489, AGEC 491; AGLS 435; AGSM 485; AGSM 489; AGSM 491; ANSC 307/FSTC 307; ANSC 457/FSTC 457; FSTC 314; FSTC 444; FSTC 485; FSTC 489; FSTC 491; NUTR 202; NUTR 300; NUTR 320/FSTC 320; POSC 406/FSTC 406.

The Graduation requirements include a requirement for 3 hours of international and cultural diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) and 3 hours of cultural discourse (http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/). Selection must be from courses on the approved list. Selection can be courses that also satisfy the requirement for social and behavioral sciences; creative arts; language, philosophy and culture; or electives. For more information on core requirements visit the University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) catalog page.

A total of 120 hours is required for graduation; 36 hours of 300/400 level courses are required to meet the Texas A&M University residency requirement.