

FOOD PRODUCTS AND PROCESSING SYSTEMS

01.0100.40

Program Description, Coherent Sequence, and Certification Information

PROGRAM DESCRIPTION

Chew on this: as society continues to focus on diet and health, this career pathway continues to expand. Individuals working in **Food Products and Processing** may uncover new food sources, study and evaluate food content, and generate ways to satisfy industry and government regulations when processing, preserving, packaging, and storing food. They also create new food products and inspect food-processing areas to make sure that all necessary standards are met including sanitation, safety, quality, and waste management. The food science industry incorporates food chemistry, food microbiology, food safety, nutrition, food processing, and food technologies in its careers. But this doesn't mean everyone is going to work in a lab.

Communication skills and knowledge of basic business principles is also important. Some graduates may go into product development or processing, while others find jobs at regulatory agencies or in management and sales.

As the population expands and the public increases their focus on diet, health, and food safety, the job opportunities will grow and strengthen for food scientists and technologists—especially in quality assurance and food safety. Food scientists produce food, ensure its safety and develop new products; they deal with food until it goes into the stomach of consumers. Because of this, as long as people have to eat, there will be careers in **Food Products and Processing** such as: Food and drug inspector, Meat scientist, Food scientist, Dietician, Quality control specialist, Development chef.

To pursue a career in **Food Products and Processing**, a solid education in science is key. Take multiple science courses during middle and high school, which will create a good base of knowledge when entering college. Agriscience can also help you prepare for a food science career, through research projects and classroom instruction. Seek opportunities to job-shadow food science professionals and others within this industry to learn even more.

The Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards provide Arizona agricultural education leaders and educators with a high-quality, rigorous set of standards to guide what students should know and be able to do after completing a program of study in each of the AFNR career pathways.

The **Food Products and Processing Systems** (FPP) Career Pathway encompasses the study of food safety and sanitation; nutrition, biology, microbiology, chemistry, and human behavior in local and global food systems; food selection and processing for storage, distribution and consumption; and the historical and current development of the food industry. Students completing a program of study in this pathway will demonstrate competence in the application of principles and techniques for the development, application, and management of food products and processing systems in AFNR settings. In addition to the required technical

FOOD PRODUCTS AND PROCESSING SYSTEMS

01.0100.40

Program Description, Coherent Sequence, and Certification Information

skills, students will also develop leadership, advanced employability, critical thinking, applied academic, and life management skills. The program utilizes a delivery system made up of three essential and required components: formal instruction, experiential education through Supervised Agricultural Experiences (SAE), leadership and personal development through the Career and Technical Student Organization FFA.

COHERENT SEQUENCE

01.0100.10 - Food Products and Processing Systems I ***and***

01.0100.12 - Food Products and Processing Systems II ***and***

01.0100.20 - Food Products and Processing Systems III ***and program may elect to add:***

01.0100.25 - Food Products and Processing Systems IV ***or***

01.0100.70 - Food Products and Processing Systems – DCE (Diversified Cooperative Education) ***or***

01.0100.75 - Food Products and Processing Systems - Internship ***or***

01.0100.80 - Food Products and Processing Systems – Cooperative Education

FOOD PRODUCTS AND PROCESSING SYSTEMS

01.0100.40

Program Description, Coherent Sequence, and Certification Information

TEACHER CERTIFICATION REQUIREMENTS

CAREER PREPARATION: The instructor must be ADE/CTE certified according to the following Certificates PCTA, SCTA, SSCTEA

Note:

- **Food Products and Processing Systems 01.0100.70** may be a part of the sequence and the teacher must hold a Cooperative Education Endorsement (CEN).
- Teacher/Coordinator **01.0100.75** is not required to have a Cooperative Education Endorsement (CEN).
- Teacher/Coordinator **01.0100.80** is required to have a Cooperative Education Endorsement (CEN).

CERTIFICATE TYPES

PCTA Provisional Career and Technical Education Agriculture

SCTA Standard Career and Technical Education Agriculture

SSCTEA Standard Specialized Career and Technical Education Agriculture

Additional Endorsment Certifications for Agricultural Teachers Seeking Integrated Academics Credit

NES Biology