



Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

Program of Study: *Plant Science*

The Plant Science program of study focuses on occupational and educational opportunities associated with the science, research, and business of plants and other living organisms. This program of study includes the application of biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field

Secondary Courses for High School Credit

9th Grade	Principle of Agriculture, Food and Natural Resources
10th Grade	Floral Design
11th Grade	Advanced Floral Design
12th Grade	- Practicum in Agriculture (Floral) - Practicum in Agriculture (Ag Center)
Optional Electives	- Horticulture Science - Career Prep 1

Internship and Practicum Opportunities

Students have the opportunity to gain hands-on experience in a variety of different businesses. There are numerous internships opportunities including the following: **Floral Bar, Davis Floral, HEB, and more.**

Career and Technical Student Organization (CTSO)

FFA

National FFA Organization

Career & Technical Student Organizations (CTSOs) are student-led organizations that build leadership, career skills, and real-world experience through competitions, networking, and hands-on learning.

Aligned Industry-Based Certifications

- TSFA Level 1 Floral
- TSFA Knowledge Based Floral



Successful completion of the Plant Science program of study will fulfill requirements of the **Business and Industry endorsement.**



Example Postsecondary Opportunities

Apprenticeships

- Horticulturist

Associate Degrees

- Biology/Biological Sciences
- Biological and Physical Sciences

Bachelor's Degrees

- Horticulture
- Plant Pathology/Phytopathology

Master's, Doctoral, and Professional Degrees

- Plant Breeding
- Botany/Plant Biology

Additional Stackable IBCs/License

- Nursery Floral License
- Horticulturist Certification



Example Aligned Occupations

Floral Designer

Median Wage: \$44,720
Annual Openings: 329
10-Year Growth: 2%

Floral Manager

Median Wage: \$101,290
Annual Openings: 92
10-Year Growth: 1.3%

Farmers, Ranchers, and Other Agricultural Managers

Median Wage: \$65,490
Annual Openings: 28,020
10-Year Growth: 4%

For more information, visit the KISD Course Guide
<https://tinyurl.com/464uxm25>

