

PLANT SCIENCE

PROGRAM OF STUDY

The Plant Science program of study focuses on the science, research, and business of plants and other living organisms. It teaches students how to apply biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.



INDUSTRY-BASED CERTIFICATION OPPORTUNITIES

Texas State Floral Association Certifications:
Floral Skills Knowledge Base; Level I; Level II

Texas Data: Collected by TEA October 2019

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Soil and Plant Scientists	\$54,662	116	21%
Tree Trimmers and Pruners	\$32,240	589	14%
Pesticide Handlers, Sprayers, and Applicators	\$36,733	196	22%
Landscaping Supervisors	\$44,408	807	19%
Biological Technicians	\$42,931	452	17%

RECOMMENDED COURSE SEQUENCE

- 1 LEVEL** Principles of Agriculture, Food, and Natural Resources
- 2 LEVEL** Floral Design and/or Horticulture Science (LHS, CPHS)
- 3 LEVEL** Advanced Floral Design
- 4 LEVEL** Practicum in Agriculture, Food, and Natural Resources: Plant Science

NOTE: See reverse for additional course sequence options and endorsement requirements. Course descriptions and details can be found in the course catalog.

WORK-BASED LEARNING EXPERIENCES

Industry Guest Speakers; Field Trips; Greenhouse Experiences (LHS, CPHS); Campus and Community Floral Services; Internships.

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

FFA; National Technical Honor Society (NTHS).



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 a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Non-Discrimination Statement

It is the policy of Leander ISD not to discriminate on the basis of race, color, national origin, sex or handicap in its Career and Technology Education Programs, services, or activities. Leander ISD will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs. Es norma de Leander ISD de no discriminar por motivos de raza, color, origen nacional, sexo o impedimento, en sus programas, servicios o actividades vocacionales. Leander ISD tomará las medidas necesarias para asegurar que la falta de habilidad en el uso de la lengua inglés no sea un obstáculo para la admisión o participación en todos los programas educativos y vocacionales.

PLANT SCIENCE

BUSINESS AND INDUSTRY

A student may earn a Business and Industry endorsement by completing foundation and general endorsement requirements. Endorsement course options for the Plant Science program of study are listed below.



4 CREDITS REQUIRED

Choose 2 credits from the following:

- Horticulture
- Floral Design
- Advanced Floral Design

Choose additional credits from the following:

- Professional Communications or Entrepreneurship
- Principles of Agriculture, Food & Natural Resources
- Practicum in Agriculture, Food and Natural Resources: Plant Science
- Interior Design I
- Architectural Design I
- Career Preparation
- Project-based Research

NOTE: Students who complete the Plant Science Program of Study requirements are eligible to earn a STEM endorsement by also completing Algebra II, Chemistry and Physics.

INDUSTRY-BASED CERTIFICATION OPPORTUNITIES

The Texas State Floral Association Floral Skills and Knowledge Based Certification exam measures the following competencies such as industry-specific vocabulary, plant identification and the scientific and common names of plants.

The Texas State Floral Association Level One Floral Certification exam includes competencies such as understanding industry-specific vocabulary, plant identification, and common and scientific names of plants. In addition to the written exam, testers will be asked to complete a nine carnation triangle hands-on design and a rose boutonniere hands-on design. The following principles and elements of floral design should be considered as a tester designs the hands-on projects for the certification; Balance, Mechanics, Proportion/Scale, Depth/Rhythm, Focal Point, Dominance, Skeleton, Foliage, Unity, Form and Line.

The Texas State Floral Association Level Two Floral Certification includes competencies such as understanding industry-specific vocabulary, plant identification, and common and scientific names of plants. In addition to the Level 1 certification, students will be asked to complete a portfolio which includes an asymmetrical arrangement, vase arrangement, bow making/dress a plant, a wired & taped corsage, a stylized permanent botanical, volunteer/sharking of floral skill at two events, and any other designs the student would like to share.

NOTES:
