# Agriculture, Food, and Natural Resources Career ClusterStatewide Program of Study: Animal Science; Agriculture, Food, and Natural Resources Career Cluster

|  |  |
| --- | --- |
| **Level 1** | Principles of Agriculture, Food, and Natural Resources |
| **Level 2** | Small Animal Management  Equine Science |
| **Level 3** | Livestock Production/Lab |
| **Level 4** | Advanced Animal Science |

| **HIGH SCHOOL/ INDUSTRY CERTIFICATION** | **CERTIFICATE/ LICENSE\*** | **ASSOCIATE’S DEGREE** | **BACHELOR’S DEGREE** | **MASTER’S/ DOCTORAL PROFESSIONAL DEGREE** |
| --- | --- | --- | --- | --- |
| Licensed Veterinary Technician | Pet Groomer | Food Science and Technology | Animal Sciences | Genetics |
| Feedyard Technician in Cattle Care and Handling | Veterinary  Technician | Veterinary Studies | Agriculture | Veterinary Medicine |
| Certified  Veterinary  Assistant | Licensed Breeder | Biotechnology Laboratory Technician | Biology | Biological and Physical Sciences |
|  |  | Biology Technician | Zoology/ Animal Biology | Biological and Biomedical Sciences |

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

| **Occupations** | **Median Wage** | **Annual Openings** | **% Growth** |
| --- | --- | --- | --- |
| Animal Breeders | $39,135 | 28 | 9% |
| Animal Scientists | $57,533 | 22 | 12% |
| Medical Scientists | $63,898 | 435 | 27% |
| Veterinarians | $93,496 | 294 | 24% |
| Zoologists and Wildlife Biologists | $67,309 | 45 | 32% |

**WORK BASED LEARNING AND EXPANDED**

**LEARNING OPPORTUNITIES**

| **Exploration Activities:** | **Work Based Learning**  **Activities:** |
| --- | --- |
| Texas FFA | Agri-Science Fair  4H  Volunteer at a local farm or veterinary office  FFA Supervised Agriculture Experience (SAE) |

**The Animal Science program of study focuses on the science, research, and business of animals and other living organisms. It teaches CTE learners how to apply biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students may also research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.**

****

**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.**

Successful completion of the Animal Science program of study will fulfill requirements of a Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised - July 2020

## COURSE INFORMATION

| **COURSE**  **NAME** | **SERVICE ID** | **PREREQUISITES (PREQ)**  **COREQUISITES (CREQ)** | **Grade** |
| --- | --- | --- | --- |
| Principles of Agriculture, Food, and Natural Resources | 13000200 (1 credit) | None | 9-12 |
| Small Animal Management | 13000400 (0.5 credit) | None | 10-12 |
| Equine Science | 13000500 (0.5 credit) | None | 10-12 |
| Livestock Production/Lab | 13000300 (1 credit)  13000310 (2 credits) | None | 10-12 |
| Advanced Animal Science | 13000700 (1 credit) | PREQ: Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production; | 11-12 |

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER,

PLEASE CONTACT: Les Hudson | Les.Hudson@tea.texas.gov

<https://tea.texas.gov/cte>

(District) offers career and technical education programs in (types of programs offered). Admission to these programs is based on (admission standards). It is the policy of (District) not to discriminate on the basis of race, color, national origin, sex or handicap in its vocational programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended. It is the policy of (District) not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended. (District) 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. For information about your rights or grievance procedures, contact the Title IX Coordinator at (physical address of Coordinator) (email address of Title IX Coordinator), (phone number of Title IX Coordinator), and the Section 504 Coordinator at (physical address of Coordinator), (email address of Section 504 Coordinator), (phone number of Section 504 Coordinator)