



Principles of Agriculture, Food, and Natural Resources

**Level 1**

Wildlife, Fisheries, and Ecology Management

**Level 2**

**Level 3**

Practicum in Agriculture, Food, and Natural Resources

**Level 4**

HIGH SCHOOL/INDUSTRY CERTIFICATION	CERTIFICATE/LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/DOCTORAL PROFESSIONAL DEGREE
Wastewater Collections, Class 1	Board Certified Environmental Engineer - Hazardous Waste Management	Environmental Science	Environmental Science	Environmental Science
Water Operators, Class D	Certified Water Technologist	Environmental Studies	Environmental/Environmental Health Engineering	Environmental/Environmental Health Engineering
OSHA Hazardous Waste Operations and Emergency Response	Certified Environmental Scientist	Wildlife, Fish, and Woodlands Science and Management	Wildlife, Fish, and Woodlands Science and Management	Wildlife, Fish, and Woodlands Science and Management
	Certified in Public Health	Environmental Engineering Technology/Environmental Technology	Natural Resources Law Enforcement and Protective Services	Fishing and Fisheries Science and Management

Occupations	Median Wage	Annual Openings	% Growth
Environmental Engineering Technicians	\$53,352	101	32%
Environmental Engineers	\$86,757	288	25%
Environmental Science and Protection Technicians, Including Health	\$40,268	508	17%
Environmental Scientists and Specialists, Including Health	\$77,896	644	24%
Zoologists and Wildlife Biologists	\$67,309	45	32%

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.

The Environmental and Natural Resources program of study explores the occupations and educational opportunities associated with the research, design, and planning of engineering or technical duties in the prevention and control of environmental hazards. This program of study may also include exploration into conducting research for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population.



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.

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES	
Exploration Activities:	Work Based Learning Activities:
Attend summer leadership events Texas FFA	Intern at a waste treatment plant FFA Supervised Agriculture Experience (SAE)

Successful completion of the Environmental and Natural Resources program of study will fulfill requirements of the Business and Industry Endorsement. Revised - July 2020



# COURSE INFORMATION

COURSE NAME	SERVICE & COURSE ID	PREREQUISITS (PREQ) COREQUISITES (CREQ)	Grade
Principles of Agriculture, Food, and Natural Resources	13000200 / 8010 (1 credit)	None	9-12
Wildlife, Fisheries, and Ecology Management/Lab	13001500 / 8035 (1 credit)	Principles of Agriculture, Food, and Natural Resources	10-12
Practicum in Agriculture, Food, and Natural Resources	13002500 / 8058 (2 credits)	Advanced Floral Design, Veterinary Medical Applications, Livestock Production, or Ag Mechanics	11-12

## BISD Recommended Course Sequence

Grade	9 <sup>th</sup> Year	10 <sup>th</sup> Year	11 <sup>th</sup> Year	12 <sup>th</sup> Year
<b>Courses</b>	Principles of Agriculture, Food, & Natural Resources	Wildlife, Fisheries, & Ecology	Livestock Production	Practicum in Agriculture, Food, & Natural Resources