



Level 1 Principles of Agriculture, Food & Natural Resources

Level 2 Wildlife, Fisheries & Ecology Management

Level 3 Range Ecology Management

Level 4 Practicum in AFNR**
Advanced Ag – PBR **
Extended Career Preparation I **

Successful completion of a **Program of Study** will fulfill requirements of earning an **Endorsement**.

* District Technology Credit **List Driven Course

***Also offered non Dual Credit

HIGH SCHOOL/INDUSTRY CERTIFICATION	CERTIFICATE/LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/DOCTORAL PROFESSIONAL DEGREE
	Board Certified Environmental Engineer - Hazardous Waste Management	Environmental Science	Environmental Science	Environmental Science
	Certified Water Technologist	Environmental Studies	Environmental/Environmental Health Engineering	Environmental/Environmental Health Engineering
	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

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.

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%



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

COURSE INFORMATION

COURSE NAME	LOCAL COURSE ID	PREREQUISITS (PREQ) COREQUISITES (CREQ)	Grade
Principles of Agriculture, Food, and Natural Resources	12000 (1 credit)	None	9-10
Wildlife, Fisheries, and Ecology Management	12012 (1 credit)	PREQ: Principles of AFNR	10-11
Range Ecology and Management	12013 (1 credit)	PREQ: Principles of AFNR	10-11
Practicum in Agriculture, Food, and Natural Resources **	12014 (2 credits)	PREQ: A sequence of courses from this POS.	12
Advanced AG – PBR **	12020 (1 credit)	PREQ: A sequence of courses from this POS.	12
Extended Career Preparation I **	12255 (3 credits)	PREQ: A sequence of courses from this POS.	11-12

* District Technology Credit **List Driven Course

Recommended Technology Credit = Principles of Information Technology or Principles of Arts, A/V Technology

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

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Alief ISD does not discriminate on the basis of race, color national origin, handicap or sex. The Alief ISD Career and Technology Education program operates in accordance with the provision in Titles VI, VII and IX and section 504 of the Department of Health, Education and Welfare. Alief ISD program admission procedures, facilities and graduation requirements are designed to eliminate discrimination. Alief ISD will take steps to ensure that lack of English language skills will be not a barrier to admission and participation in all programs, including Career and Technology Education.

Endorsement: Business & Industry

June 2021