



College of Agricultural, Consumer and Environmental Sciences

New Mexico State University • aces.nmsu.edu/aes



Agricultural Experiment Station

MISSION: NMSU’s Agricultural Experiment Station (AES) is the principal research unit of the College of Agricultural, Consumer and Environmental Sciences. The AES system supports fundamental and applied science and technology research to benefit New Mexico’s citizens in the economic, social, and cultural aspects of agriculture, natural resource management, and family issues. The AES system consists of scientists on NMSU’s main campus, and at off-campus Agricultural Science Centers in Alcalde, Artesia, Clayton, Clovis, Corona, Farmington, Las Cruces, Los Lunas, Mora, and Tucumcari.

AES faculty are training the next generation of agricultural professionals, providing hands-on learning opportunities for high school, undergraduate and graduate students while addressing the needs of agricultural communities and families throughout the state. Most majors within the college are STEM-based, graduating work-force ready students with experience in highly-valued professions that help build our economy. On average, AES faculty mentor 150 graduate students and provided work experiences for over 200 high school and undergraduate students annually.

ACES 4 Pillars of Economic and Community Development

The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and extension programs.

The research priorities of the College of Agricultural, Consumer and Environmental Sciences are aligned with the 4 pillars of economic and community development: Food and Fiber Production and Marketing, Water Use and Conservation, Family Development and Health of New Mexicans, and Environmental Stewardship. The college also focuses on foundational education and training in core competencies and life skills, such as critical thinking skills, oral and written communication, STEM and agricultural education, agricultural literacy, and leadership development.

4 Pillars for Economic and Community Development



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ACES RESEARCH AREAS & FUNDING PRIORITIES

FOOD AND FIBER PRODUCTION AND MARKETING

- Plant and Animal Production and Health, including Biomedical Research
- Food Safety, Food Technology, and Value-Added Bioprocessing
- Nutraceuticals and Functional and Healthy Foods
- Plant and Animal Improvement using Genetic and Bioinformatics Tools
- Integrated and Novel Cropping Systems to Improve Resource Use Efficiency and Productivity
- Bioeconomy and Development and Marketing of Value-Added Products
- Integrated Pest Management in Crop and Urban Ecosystems
- Development of Alternative Crops and Mechanization Systems
- Economic Impact of Gastro-Tourism Events
- Organic and Specialty Crop Production and Marketing

WATER USE AND CONSERVATION

- Water Conservation in Cropping and Urban Ecosystems
- Water Quality and Availability, Development of Alternative Water Sources
- Irrigation Design and Efficiency
- Development and Use of Drought-Tolerant Plants

FAMILY DEVELOPMENT AND HEALTH OF NEW MEXICANS

- Nutrition and Chronic Disease Management
- Building Resilience in People (Physical, Emotional, and Financial Well-being)
- Parenting Education and Prevention of Adverse Childhood Experiences
- Health-Promoting Foods and Behaviors
- Alternatives to Synthetic Pesticides

ENVIRONMENTAL STEWARDSHIP

- Geospatial and Modeling Tools for Water, Soil, Wildlife, and Environmental Management
- Soil Health Assessment and Management
- Natural Resource, Water, and Environmental Economics and Policy
- Interconnection between Humans, Food, Energy and Water
- Food Waste Reduction Programs in the Hospitality Industry
- Invasive Species and wildlife conservation
- Climate Variability and Desertification

FOUNDATIONAL EDUCATION AND TRAINING

- STEM and Agricultural Education and Training (critical thinking and analysis of complex information)
- Agriculture Literacy Education for Teachers, Students, and Consumers
- Research-Based Design and Development of Educational Tools (e.g. Apps, Games, Video Animations and Virtual Labs)
- Research on the Effectiveness of Innovative Educational Media
- Volunteer Development and Management
- Leadership Development
- Improved Research Capacity for Underserved Populations

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