

GRADUATE CERTIFICATE IN FOOD-ENERGY-WATER SYSTEMS (FEWS)

This certificate will provide students with a broad overview of Food-Energy-Water (FEW) nexus issues, an understanding of the science underpinning FEW issues, working knowledge about the tradeoffs amongst sectors and experience analyzing the socio-economic constraints and policy limitations incumbent on solutions to FEWS challenges. The certificate will equip students with transdisciplinary and systems thinking skills that advance capacity to assess and solve complex FEWS issues.

Learning Objectives

Students who obtain the Graduate Certificate in FEWS will develop:

1. Capacity to explain and critically analyze issues related to each food, energy, and water systems and the connections between those systems;
2. Capacity to understand and consider tradeoffs and interconnections among FEW sectors in semi-arid regions with scarce water resources;
3. Capacity to synthesize broad, integrated perspectives on the interactions among natural and built infrastructure and socioeconomic and policy considerations, including social and environmental justice and public health outcomes;
4. Ability to communicate across disciplines and understand jargon, perspectives, and the conceptual frameworks used outside of their core discipline;
5. Skills to apply systems thinking tools improve understanding of complex food, energy, water problems.