

InFEWS FRAMEWORK

mate variability STRESSORS shifting demographics persistent waste and pollution **CHALLENGE 1:** Closing and Optimizing the FEW Loop **CHALLENGE 2:** Resolving Spatiotemporal Discounnects ENERGY **CHALLENGE 3:** Creating Actionable Research and Information information and data SOLUTION MECHANISMS incentives for behavior change contextualized technology

Integrating human-centered design, innovative business models, and technological advancements with an interdisciplinary framework of development and continual impact analysis, this program provides cross-cultural learning, prototyping and scaling, and new models for productive multi-stakeholder collaboration.











ABOUT US

Poor communities often face extreme challenges accessing nutritious food, clean and reliable energy, and safe water, which will be amplified withadditional climate variability, population growth, stress on infrastructures, and pollution in the future.

InFEWS supports a new generation of students working at the critical juncture of food, energy, and water. Students will master the interdisciplinary skills needed to create actionable and impactful research that is transferable from the lab to the field at scale to ultimately make real lives better.

COURSE REQUIREMENTS

2 CORE COURSES

1. Dev Eng C200: Design, Evaluate, and Scale Development Technologies 2. Dev Eng 210: Development Engineering Research and Practice Seminar

3 ELECTIVE MODULES

1. Problem Identification and Project Design 2. Evaluation Techniques and Methods for Measuring Social Impact 3. Development Technologies





A new Graduate Program at UC Berkeley starting Fall 2017

infews.berkeley.edu

InFEWS supports students doing interdisciplinary work, with projects ranging from capturing and reusing nutrients and water in organic waste products, development of small-scale water and energy technologies necessary for the agricultural sector and developing infrastructures and lifecycle methodologies to collect integrated information and data on food, energy, and water systems. Sample projects across our three challenge areas:

healthy food systems. wastes.

For additional inquiries about development engineering and the InFEWS Program, students can contact dev.eng@berkeley.edu.



OVERVIEW

DISTRIBUTED FEWS SYSTEMS: Distributed generation & storage technologies for communities in transition that support energy services, water quality and access, and

CONVERTING URBAN WASTE TO ENERGY, FOOD AND WATER: Production of fertilizer and energy from high-strength residential, municipal, and agricultural

THE INTERNET OF FOOD: Tracking, analyzing and managing food supply chains with embedded energy, water and greenhouse gases.

CONTACT US

NSF DGE #1633740