BS IN SUSTAINABLE AGRONOMY & CONTROLLED ENVIRONME

FOUR-YEAR / EIGHT-SEMESTER CURRICULUM & CEA GREENHOUSE SPECIFICATIONS

Program Description

This Bachelor of Science combines agroecological principles, automated greenhouse climate engineering, and soil reclamation techniques to optimize crop productivity while drastically minimizing synthetic chemical inputs and groundwater withdrawal.

Specialized Technical Courses

Course Code	Title	Units	Laboratory / Facility Integration
AGR-301	Soil Microbiology & Bio-Fertilizers	3 cr	Kings Hall 201: Mycorrhizal and rhizobia assays
AGR-305	Controlled Environment Climate Control	4 cr	15,000 sq ft Venlo Greenhouse computer climate automation
AGR-310	Hydroponics & Recirculating Solution Chemistry	4 cr	NFT gutter lettuce and Dutch bucket strawberry systems
AGR-401	Crop Breeding for Drought & Salinity Tolerance	3 cr	Central Valley orchard trial breeding plots
AGR-490	Agronomic Research Senior Thesis	4 cr	Multi-factorial field deficit irrigation trial report