Continuing and Professional Education

GIS Database Design

Online

Review industry-standard and emerging data design technologies for today's natural resource and land use planning. Learn to identify poor data design characteristics, convert logical data definitions and relationships to physical data design, prepare a plan for efficient data loading and manage quality assurance. Analyze real-world examples, including green site selection, government service delivery and sustainability projects. Discuss tabular, spatial, document, image and other types of data formats, as well as new challenges in integrating data of different sources, qualities, scales and complexities. Examine prevailing application development methodologies, such as:

- Interpreting and documenting business requirements
- Modeling data relationships
- Database language options
- Data population
- Database administration

Participants will propose, design and populate a database of their choice using spatial and other forms of data.

This course is intended for professionals who desire to include GIS as a tool in land use and resource planning efforts, and will also be beneficial to anyone with a strong desire to incorporate GIS database design and maintenance technology in a systematic and comprehensive manner. The course is directed at those who have a working knowledge of ArcGIS; it is highly recommended that students have experience using ArcGIS or take *Introduction to Geographic Information Systems* prior to undertaking this course.

Academic Units
3
Section Number
254GIS104
Instruction Method
Online class

Section Notes

Access to your course in Canvas will be available 7 days before the course start date.

Enrollment Policies

Drop requests (withdraw with a refund) will be approved, less a $30 processing fee, if the request is received before the refund deadline. Click here to view complete enrollment policy information including details on withdrawals and transfers.

Refund Deadline: 05/25/2026. Refunds and/or enrollment transfers will not be approved after this date.

Students enrolling after the first day of class are expected to reach out to their instructors to make sure they receive all content and are on track with the course.

Technical Requirements

To ensure your success in this course, please review our technical requirements page at online learning.

Discounts

Info Session Discount

Attendees of UC Davis Continuing and Professional Education Information Sessions may be eligible for $100 discount on a class by entering the Coupon Code provided at the Information Session. Contact UC Davis Continuing and Professional Education Student Services office, at (800) 752-0881, if you have questions about this discount.

Schedule
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Jun 1st, 2026 to Jun 5th, 2026, 12:00am to 12:00am
Mon., Jun 1st, 2026, 9:00am to 12:00pm
Wed., Jun 3rd, 2026, 9:00am to 12:00pm
Thur., Jun 4th, 2026, 9:00am to 12:00pm

Instructors
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Summer Roberts

Summer Roberts is a GIS Analyst for Jackson Family Wines as well as an instructor for UC Davis Continuing and Professional Education. Roberts obtained her B.S. in Geography/GIS from Cal Poly Pomona and her M.S. in GIS from California State University, Long Beach. She is also a certified Part FAA107 Remote Pilot. Roberts has years of experience utilizing satellite and small unmanned aerial vehicle (sUAV) imagery for remote sensing analysis used in precision agriculture, vegetation management with fire preparedness, and restoration. She also has extensive experience with photogrammetry, facilities management and documentation, fire defensible maps and field collection using the latest geospatial technologies.