SRVY - Surveying

SRVY 230 Intro to Surveying for Engineers: 3 Credits (2 Lec, 2 Lab)
PREREQUISITE: M 165Q or M 171Q or M 181Q. (F, Sp) Basic surveying measurements and computations for engineering project control, mapping, and construction layout; theory of observational errors and error propagation; fundamental concepts of horizontal and vertical control systems; use of topographic maps and plan-profile sheets; computation of horizontal and vertical curves; introduction to UAV and LiDAR use; USPLS and GIS introduction; introduction to computer tools used in Civil Engineering

SRVY 273 Route Surveying: 3 Credits (2 Lec, 1 Lab)
PREREQUISITE: SRVY 230. Route surveys, construction surveys, and earthwork calculations

SRVY 355 Surveying Calculations: 3 Credits (2 Lec, 2 Lab)
PREREQUISITE: SRVY 230. () Spring, even years. Modern instrumental and computational techniques in surveying including least squares analysis, geodesy, state plane coordinates, and the global positioning system

SRVY 361 Intro Legal Princ in Surveying: 3 Credits (3 Lec)
PREREQUISITE: SRVY 230. () Fall, even years. Principles of the profession: case law, legal aspects of boundary location, monumentation, and property descriptions

SRVY 362 Public Land Survey System: 3 Credits (3 Lec)
PREREQUISITE: SRVY 230. () Fall, odd years. Federal and state laws and regulations governing legal land surveying; case studies and professional responsibilities

SRVY 375 Analytic Photogrammetry and Remote Sensing: 3 Credits (2 Lec, 1 Lab)
PREREQUISITE: M 165Q or M 171Q or M 181Q. () Fall, odd years. Measurement and computation techniques for mapping from photographs; photo geometry, flight planning, ground control, cameras, control extension, stereoscopic instruments, UAV use in photogrammetry

SRVY 474 Project Design in Surveying: 3 Credits (2 Lec, 1 Lab)
PREREQUISITE: SRVY 230
COREQUISITE: DDON 245. () Spring, odd years. Surveying requirements of large project; land subdivision, utilities, topography, and earthwork. Term project research and report required.