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;
photogrammetry, 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: DDSN 245. () Spring, odd years. Surveying requirements
of large project; land subdivision, utilities, topography, and earthwork. Term
project research and report required