

SRVY - Surveying

SRVY 230 Intro to Surveying for Engineers: 3 Credits (2 Lec, 2 Lab)

PREREQUISITE: M 165Q or M 171Q or M 181Q. 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. 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. 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. 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. 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: DDSN 245. Surveying requirements of large project; land subdivision, utilities, topography, and earthwork. Term project research and report required