SUR: SURVEYING & RELATED AREAS

Courses

	Credit(s)	Contact	Lab
SUR 1101C. BASIC SURVEYING MEASUREMENTS.	3	4	2

BASIC SURVEYING MEASUREMENTS Prerequisite: MTB 2321 or MAC 1114 or higher mathematics or departmental approval. Elementary surveying, including fundamentals of plane surveying; use and care of equipment. Covers accurate measuring of distance; theory and practice of leveling, angles and bearings; principles and use of transit; curves; stadia; and topographic and land surveying. Coordinated class, lab and field assignments. (Special Fee: $40.00).

	Credit(s)	Contact	Lab
SUR 2202C. HIGHWAY DRAFTING AND ROUTE DESIGN.	3	2	2

HIGHWAY DRAFTING AND ROUTE DESIGN Prerequisites: SUR 1101C Recommended Prerequisites : ETD 1103C or ETD 1320C Highway drafting includes topographic maps, plans and profiles, and cross sections. Route design covers traffic and vehicular characteristics, curvature and elevation of roadbeds, earthwork, and aerial photography as they affect cost and route design. (Special Fee: $40.00).

	Credit(s)	Contact	Lab
SUR 2390C. INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS.	3	4	1

INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS This course covers the application of Geographic Information Systems to a variety of professional, industry, and business uses. It also provides students with an opportunity to gain hands-on experience in utilizing the application software currently in use in this region. (Special Fee: $40.00).

	Credit(s)	Contact	Lab
SUR 2460C. SUBDIVISIONS.	3	4	0

SUBDIVISIONS Recommended Prerequisites: ETC 2521 and SUR 2640 Introduction to the residential subdivision process; site selection and analysis; subdivision infrastructure design and construction; plat construction from tract description to final recorded plat; drafting by the latest computer software; and necessary computation; (Special Fee: $40.00).

	Credit(s)	Contact	Lab
SUR 2640C. ADVANCED SURVEYING COMPUTATIONS (SURVEYING III).	3	4	1

ADVANCED SURVEYING COMPUTATIONS (SURVEYING III) Prerequisite: SUR 1101C Recommended Prerequisites: ETD 1103C or ETD 1320C Advanced surveying office computations; traverse, horizontal curve, and vertical curve review; coordinates areas by D.M.D. and coordinates; partitioning-problems; intersection problems (line-line, line-curve, curve-curve); missing traverse parts; compound and reverse curve computations; spirals; principles of significant figures and solution analysis. (Special Fee: $40.00).

	Credit(s)	Contact	Lab
SUR 2942. INTERNSHIP IN CIVIL/SURVEYING ENGINEERING.	1-4	variable	

INTERNSHIP IN CIVIL/SURVEYING ENGINEERING Prerequisites: Satisfactory completion of all mandated courses in Reading, Mathematics, English, and English for Academic Purposes; a minimum 2.0 institutional or overall GPA; and 12 credits including both ETD 1340C and SUR 1101C. The Program Director/Program Chair/Program Coordinator or Internship Placement Office has the discretion to provide override approval as it relates to the waiver of required program/discipline-related courses. This course is a planned work-based experience that provides students with supervised career exploration activities and/ or practical experiences. Each earned credit of internship requires a minimum of 80 clock hours of work. Multiple credit course. May be repeated for credit, but grade forgiveness cannot be applied. (Internship Fee: $10.00).