CIVL1119 - Survey II: Land Surveys

Credits:	3 (1/2/0)
Description:	Students will learn civil engineering technology land surveying principles including topographic surveys, utilities, drainage and roadway alignment. This course emphasizes the use of Total Station and Global Positioning Systems (GPS) for collecting data as well as civil engineering software for processing data. Additionally, students will utilize GPS functionality on the Trimble TSC3 data collector and Trimble Business Center software.
Prerequisites:	• CIVL1100
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Utilize various coordinate mapping systems including State Plane, Universal Transverse Mercator (UTM) and other recognized standards. 2. Create a topographic map of an existing site. 3. Complete subdivision plats. 4. Analyze cross sections. 5. Compute earthwork volumes. 6. Demonstrate usage of GPS equipment. 7. Determine missing corner positions. 8. Complete survey of existing and proposed roadways. 9. Demonstrate data management skills. 10. Incorporate Trimble TSC3 data collector and Trimble Business Center software in recording and using survey data. 11. Create new projects via TSC3 data collector and Trimble Business Center software. 12. Use ActiveSync for file transfer between data collector and computer. 13. Edit GPS data and settings in Trimble Business Center software.
MnTC goal areas:	None

**Can be taking as a Prerequisite or Corequisite.*

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