

Date:	Examination No.: 15367	Version:03/09/2023	Start: 03/09/2023
Module Name - Code	Engineering Surveying - 7114		
Module Language:	English		
Responsible:	Assistant Lecturer Ahmed Talabany		
Lecture (s):	Sapan Jabar		
College:	College of Engineering – Salahaddin University-Erbil		
Duration:	15 week – 1 semester		
Course outcomes:	At the end of the course, the students will learn how to measure angles (horizontal and vertical), calculate differences in height and elevations, and determine the horizontal distance between points. They will learn how to calculate the area of lands and road cross-sections as well as the volume of earthworks. Students will also learn how to stake out horizontal and vertical curves of roads and perform calculations		
Course Content:	The course introduces the principles of trigonometric levelling, distance measurement using tacheometry, area and volume estimation for earthwork estimation, and horizontal and vertical curves.		
Literature:	<p>Surveying for Engineers, 5th edition, By: John Uren & Bill Price.</p> <p>Construction Surveying and Lay Out, 3 edition, By: Wesley G. Crawford.</p> <p>Surveying with construction application, 5edition By: Barry F. Kavanagh.</p> <p>Fundamentals of surveying, By: S.K. Roy, 2010 India.</p> <p>Surveying I, By: Punmia, Ashor and Aron, 2005, India.</p> <p>Surveying II, By: Punmia, Ashor and Aron, 2005, India.</p> <p>Engineering Surveying, 6 edition, By W.Schofield and M.Breach.</p>		
Type of Teaching:	<p>3 hrs in theoretical lectures</p> <p>3 hrs practical sessions</p>		
Pre-requisites:	Plane Surveying		
Frequency:	Yearly in fall semester		
Requirements for credit points:	<p>For the award of credit points, it is necessary to pass the module and final exam.</p> <p>The module exam (practical and theoretical)</p> <p>Student's attendance is required in all classes.</p>		
Credit point:	5		
Grade Distribution:	<p>First: (50%) of the mark is based on the academic semester effort, which includes:</p> <p>Mid-term exam = 10%</p> <p>Quizzes and assignments= 20%</p> <p>practical tasks = 20%</p> <p>Second: (50%) of the mark is based on the final examination that is comprehensive for the whole of the study materials reviewed during the academic semester (20 practical and 30% theoretical)</p>		
Work load:	The workload is 180 hours. It is the result of 90-hour attendance and 90-hour self-study.		