Date:	Examination No.:	Version: 1/9/2022	Start: 1/9/2022
Module Name - Code	Surveying Engineering + Lab – WRE 6123		
Module Language:	English		
Responsible:	Lecturer: Dr. Abdulwahd Ali Kassem		
Lecture (s):	Lecturer: Dr. Abdulwahd Ali Kassem & Assistant Lecturer: M. Tara		
College:	College of Engineering – Salahaddin University-Erbil		
Duration:	15 week – 1 semester		
Course outcomes:	The student is able to Level by many methods; using methods of booking, reciprocal leveling, drawing the profile and cross-sections, drawing any contour map, estimating the area and volumes, using theodolite instrument in the survey, and measuring horizontal and vertical angles, traverse, and curves.		
Course Content:	Introduction and types of surveying, Leveling, methods of booking, reciprocal leveling, Profile, cross section, contouring, area and volumes, theodolite survey, traverse, and curves.		
Literature:	 1- " Engineering Surveying", by W. Schofielf and M. Breach. 2- " Surveying for construction ", by William Irvine and Finelay Mclennan. 3- " Elementary Surveying", by Paul R. wolf and Russell C. Brinckler. 		
Type of Teaching:	3 hrs in lectures + 2 hrs practical		
Pre-requisites:	No		
Frequency:	Yearly in the fall semester		
Requirements for credit points:	For the award of credit points, it is necessary to pass the module exam. The module exam contains: Daily Requirements (Assessments, Quizzes, Daily Activities and weekly reports) Student's attendance is required in all classes and field.		
Credit point:	5 credits		
Grade Distribution:	The Grade is generated from the examination result(s) with the following 30% theory 20% practical 50% final theoretical Exam		
Work load:	The workload is 150 hr. It is the result of 75 hr (45 hr theory + 30 hr practical) attendance and 75 hr self-studies.		