Date:	Examination No.:	Version:16-1-2024	Start: 16/1/2024
Module Name - Code	Data Processing		
Module Language:	English		
Responsible:	**Assistant Lecturer Mrs. Hadeel Jamal Ali**		
Lecture (s):	**Assistant Lecturer Mrs. Hadeel Jamal Ali**		
College:	College of Engineering – Salahaddin University		
Duration:	14 week – 1 semester		
Course outcomes:	**AutoCAD Civil 3D is a comprehensive civil engineering solution for all types of civil engineering projects, covering the needs of engineers, technicians, surveyors, and drafters. It provides a base level of functionality that meets the needs of everyone in the land development process, including land planners, surveyors, civil engineers, drafters, and anyone who creates supporting documents.** **AutoCAD Civil 3D provides an Application Programming Interface (API), so that other add-on products can be designed to work with AutoCAD Civil 3D.** **■ Autodesk Survey: An add-on to AutoCAD Civil 3D that provides a streamlined ability to communicate survey data to and from the field.** **■Autodesk Civil Design: An add-on to AutoCAD Civil 3D that provides transportation and site engineering tools, and hydrology and hydraulics design and analysis.** **The Lab Course will enable the students to understand the fundamentals and programming knowledge in civil 3D.**		
Course Content:	By the end of the course, student should be able to: 1. Demonstrate the ability to: Read civil/construction drawings (civil plans, profiles, street sections, etc.). Determine drawing scale factor in drawings and final scale of drawings. Use AutoCAD standards and commands for creating engineering civil/construction drawings. 1. Work in teams to accomplish a variety of tasks. Includes ability to communicate, manage time, meet deadlines, resolve conflicts, etc. Apply selected engineering design processes for creating a subdivision development: import survey points, create surfaces (TIN/contours), design lots, design a street alignment, and prepare a street profile. Create a site plan for a lot in the subdivision.		
Literature:	1. Auto desk, Inc. 2008 “Getting Started”. 2. Auto desk, Inc. 2009 “Auto desk Getting Started”. 3. Auto desk, Inc. 1999 “Auto cad land development desktop”. 4. Auto desk, Inc. 2011 “AutoCAD Civil 3D”. 5. Auto desk, Inc. 2022 “A Practical Guide to Autodesk Civil 3D”.		
Type of Teaching:	**2 hrs Theorical Lectures** **2 hrs Practical Lectures**		
Pre-requisites:			
Frequency:	Yearly in Spring semester		
Requirements for credit points:	For the award of credit points it is necessary to pass the module exam. The module exam (praccal and theorecal) contains: 2 hrs in Theorecal lectures 2 hrs Praccal lectures Student's aendance is required in all classes.		
Credit point:	5		
Grade Distribution:	The Grade is generated from the examination result(s) with the following 20% activity 10% practical 20% mid-term exam 20% final practical exam 30% final theoretical Exam		
Work load:	The workload is 150h. It is the result of 60h attendance and 90h self studies.		