Date:	Examination No.:	Version: 1/2/2023	Start: 1/2/2023
Module Name - Code	Engineering Hydrology –		
Module Language:	English		
Responsible:	Lecturer: Dr. Abdulwahd Ali Kassem		
Lecture (s):	Lecturer: Dr. Abdulwahd Ali Kassem		
College:	College of Engineering – Salahaddin University		
Duration:	15 week – 1 semester		
Course outcomes:	Student is introduced to Engineering Hydrology including hydrological cycle on earth , fundamentals of hydrology, storm analysis ,analysis of rainfall data, duration, return period , characteristics of catchment areas, surface runoff and its computation ,hydrological measurement, evaporation , evapotranspiration, infiltration , infiltration index , rainfall losses ,watershed hydrology, Methods of surface runoff estimations, hydrographs, unit hydrograph ,synthetic unit hydrographs ,rational method , flood , flood routing , routing of river flow. By the end of this course you should be able to Analysis the rainfall data, storm analysis, estimate of the water losses, and find of the peak discharge for designing.		
Course Content:	Introduction and Hydrological cycle on earth, Fundamentals of hydrology, Precipitation measurement, Analysis of rainfall data, Duration, return period, Characteristics of catchment areas, Hydrological measurement, Rainfall losses, Infiltration, infiltration index, Stream measurement, Runoff, CN method, Hydrographs, Unit hydrograph and Synthetic unit hydrographs, and urban hydrology.		
Literature:	1- " Engineering Hydrology ", by K Subramanya. 2- " Irrigation Engineering and Hydraulic Structures ", by S. R. Sahasrabudhe. 3- "Apply Hydrology", by Ven T. Chow. 4- " Hydrologic analysis and design ", by Richard H. McCuen.		
Type of Teaching:	4 hrs in lectures		
Pre-requisites:	No		
Frequency:	Yearly in the spring semester		
Requirements for credit points:	For the award of credit points, it is necessary to pass the module exam. The module exam contains: Midterm and Final Semester Exams Daily Requirements (Assessments, Quizzes, Daily Activities and etc..) Student's attendance is required in all classes.		
Credit point:	5 credits		
Grade Distribution:	The Grade is generated from the examination result(s) with the following 40% daily exam and activity (4 exams each one 10%) 60% final theoretical Exam		
Work load:	The workload is 120 hr. It is the result of 60 hr attendance and 60 hr self-studies.		