# WORKSHOP ON WATERSHED DELINEATION USING Q-GIS

Date: 16/09/2021 Semester: 5<sup>th</sup>, Civil Engineering Department



## **Objective-**

The main objective of this workshop to explain the basics of GIS and Q-GIS and explain the water flows downhill and perpendicular to contours, a watershed can be determined from a topographical map. This workshop would enable the students to delineate the watershed. To provide the knowledge of beyond the syllabus in the subject of Remote Sensing this workshop has been conducted.

### Summary:

The purpose of this workshop is to illustrate watershed and stream network delineation based on digital elevation models using the Hydrology tools in the Q-GIS Geo-processing toolbox. In this workshop, it will perform drainage analysis on a terrain model for the Basin. These data are then be used to develop a vector representation of catchments and drainage lines from selected points that can This workshop shows how detailed information on the connectivity of the landscape and watersheds can be developed starting from raw digital elevation data, and that this enriched information can be used to compute watershed attributes commonly used in hydrologic and water resources analyses.

Feedback from Participants	Out of 10 (Average)
(a) Knowledge	9.2
(b) Practical Experience	9.3
(c) Duration	9.5
(d) Expert Knowledge and Experience	9.5



#### **Course Participant:**

Workshop was organized for the students of 5<sup>th</sup> semester from Civil Engineering Department. Total of 40 participants participated and each one was explained the use of remote sensing in hydrology tools are used to derive several data sets that collectively describe the drainage patterns of the basin. Geo-processing analysis is performed to recondition the digital elevation model and generate data on flow direction, flow accumulation, streams, stream segments, and watersheds.

## EXPERT:

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Civil Engineering Department Norkshop Report