

The Importance of Localization in Large Construction Projects

Authors : Ali Mohammadi

Abstract : The basis for the construction of any project is a map, a map where the surveyor can determine the coordinates of the points on the ground by using the coordinates and using the total station, projects such as dams, roads, tunnels and pipelines, if the base points are determined using GPS prepared can create challenges for the surveyor to control. First, we will examine some map projection on which the maps are designed, and a summary of their differences and the challenges that surveyors face in order to control them, because in order to build projects, we need real lengths and angles, so we have to use coordinates that provide us with the results of the calculations. We will examine some examples to understand the concept of localization so that the surveyor knows if he is facing a challenge or not and if he is faced with this challenge, how should he solve this problem.

Keywords : UTM, scale factor, cartesian, traverse

Conference Title : ICESSG 2023 : International Conference on Engineering Surveying and Space Geodesy

Conference Location : Toronto, Canada

Conference Dates : September 18-19, 2023