

# Construction process

[Science](#), [Physics](#)



## INTRODUCTION

Construction is a vast process where a lot of obstacles are faced. It can be because of the conditions of the terrain where a construction is on-going or because of the nature of the construction itself which causes the difficulties. So to overcome some of these or most of it there is always surveys done before a construction is started. Therefore a survey is a part of the construction process.

And these surveys can be of different types depending on the situation of the construction process for example the surveys done before the start of the construction and at the surveys during the construction and after finishing the construction varies hence the purpose of these surveys as well as the instruments and the procedures for the surveys varies. Since then it is important to know some of the obstacles which we face at the different faces of constructions and how we deal with them to bring a solution to make the process of construction easier and safer.

This assignment is a partial fulfilment of the Geomatic Engineering (ECV 3213) coursework, this will cover an explanatory report on how to overcome the obstructions to horizontal distance measurement using tape, permanent tests and adjustments for accuracy in theodolite, digital terrain modelling and verticality check / control for multi-story building works during construction. The report will discuss three examples of obstructions to horizontal distance measurement while using tape and how it is dealt to overcome this or solutions for these obstructions.

For the permanent tests and adjustments for accuracy in theodolite, the collimation in azimuth, the spire and plate level tests will be taken as consideration and deliberated. Also more explanations on the remaining two items will be discussed. In the report purpose of the instruments or methods used, the procedures, the advantages and disadvantages, some practical applications with examples will be discussed. Further more relevant illustrations and sketches will be included.

The aim of the assignment is to carry out a literature search and read about the above mentioned four important items in the field of surveying and learn and understand the significance of these for the construction process hence for the surveying. The objective is to give the readers a clear cut Image of the topics and how it is practically applied in the field and provide the readers with relevant and understandable information.