

CES1204 Field Data Collection (x y z fix)

LH	PH	TH	CH	WTM	WE	WCM	CU
45	0	0	45	100	60	40	3

Course description

Following from the introductory course, this course concentrates on the positioning of data found in the field in a three dimensional environment, and positioning it numerically and at scale on paper in a two dimensional format. It has a decided bias towards measuring relative heights (levelling) as the level is the easiest instrument to learn, and the concept of the vertical, and how to describe it on paper is the most fundamental parameter used by the Civil Engineer.

Objectives

- The purpose of this course is to present Surveying in its measurement and positioning aspect particularly in regard to relative heights
- The basics of methods of measurement, particularly of heights, and the help given by different instruments are expounded
- The common pitfalls in measuring and positioning are pointed out
- How different types of errors occur and are propagated and how they are dealt with are explained.
- Positioning by coordinates.