CES1205 Practice at Leveller level

(Prerequisite CES1105)

LH	PH	TH	CH	WTM	WE	WCM	CU
0	120	0	60	100	60	40	4

Course description

This course uses what has been learned in courses CES1201, CES1202 and CES1204 in combination in field work The level is the most used instrument in Civil Engineering Surveying and the most usual choice for height control. The leveller needs to be absolutely reliable. Much practice is needed, as the work must be professional, even though used by junior members of the survey team.

The student groups are taught how to carry out tasks, then partly supervised and partly left to fend for themselves in accomplishing the tasks.

Objectives

- The purpose of this course is to give practice with the level instrument so as to use it fast and efficiently, and in its many uses
- To give a practical understanding of back sights, fore sights, intermediate sights and stadia readings, rises, falls, height of instrument, height of collimation, reduced level and angle and distance measurements for positioning
- To give a practical grasp of loop circuits, link circuits and open circuits, misclosures, checking by cuts and adjustments
- To show in practice when to reduce by rise and fall method and height of collimation method, what uses the rises and falls can be put to without reduced levels, and when they can be avoided by 'paragraphing', when is a reduced level safe to accept
- How to tackle sighting over long distances (valley crossing)
- How to adjust the level instrument (permanent adjustment)