

DESIGN AN ACADEMIC TOWER WITHIN THE EXISTING LANDSCAPED AREA

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ABSTRACT

To design of an academic tower is to be located in the landscape which also is the open space within the 4 existing INTI Academic blocks A, B, C and D. the area of the landscape is 66.8m x 67.2m (4489m²). It will provide for additional class rooms for teaching and learning. On the other hand, my project also abstraction to design the glass roof will be used to cover the open air between the tower and the existing academic blocks in order to prevent the splashing of rain water onto the verandas of the existing academic blocks. The remaining open space on the ground will be sued as landscape area. Inside the buildings have to design the pathway bridges for new academic blocks (my project building) connected to existing academic blocks.

The academic tower will be designed using reinforced concrete based on BS 8119 and BS 6399 Part 1 to design superstructure and substructure. The design of steel truss of glass roof is required and it is designed based on BS 5950 Part 1. On the other hand, I have to set up a rainwater harvesting system in the academic blocks for supply water to toilets flusher. The water tanks should have the ability to store adequate rain water volume.

All structural elements design procedures are included inside the report, and giving a guide to people when design structural members. Inside the appendixes are shown design member calculations.