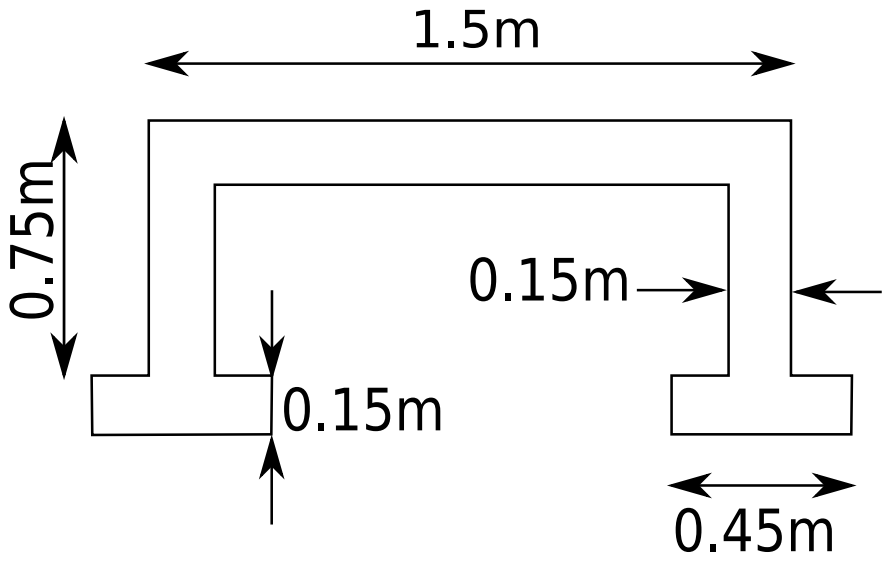
DEPARTMENT OF CIVIL ENGINEERING

ITER, SoA University

Reinforced Concrete Design (CVL4121)
Design and Manufacturing Assignment

Determine the reinforcement to be provided in frame given in Figure below consisting beam embedded in two columns for dead load only. gross section of beam and column is $150mm \times 150mm$ and $450mm \times 450mm$ for footing, Material to be used: M25 and Fe250. Provide appropriate lateral reinforcement. Assume effective cover to be 15mm and bearing capacity of soil is $300kN/m^2$.



You can refer to footing design based on Example 14.2 of text book, beam design will be continuous based on Example 5.2 and 5.3 and column design will be based on Example 13.13. Also watch this video.