

## **ABSTRACT**

This project showcases a comprehensive analysis and design of a five-floor residential building, situated in Kericho County. The main objective of the project was to come up with a structure that is aesthetically pleasing and environmentally friendly as well as one that meets the safety and integrity requirements. The project commenced with an extensive examination of the architectural drawings, mapping out various structural elements like beams, and then progressed to design analysis and design calculations according to the building codes, that is, Eurocodes which then aid us with the development of design drawings. Building Information Modelling software, Revit, was vital in coming up with the design drawings. This project contributes to the field of structural engineering as it gives insights into the pragmatic implementation of modern building design principles while also touching on resilient construction processes.