

# The Role of Computer Technology in Mechanical Engineering Education in Kenyan Universities.

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## Abstract

This paper examines the extent of exposure of mechanical engineering students in two Kenyan universities and colleges of technology to engineering computer application programmes. In view of this, a survey study was adopted, two research questions were raised and a null hypothesis formulated. The population of the study consisted of 225 final year engineering students from two leading Kenyan universities of technology that offer mechanical engineering education programme. The findings of the study indicate a relationship between engineering computer application programmes and engineering education programmes in Kenyan universities. The study also reveals a significant difference between the exposure of engineering students to engineering computer application programmes and the expected exposure in Kenyan universities. To address these deficiencies revealed by the study, the researcher recommended among others the expansion of the curriculum of engineering education programmes to include courses like introduction to Computer Aided Design using 3-D modelling software, introduction to programming languages like Matlab or MathCAD and introduction to finite element modelling packages for numerically solving a wide variety of mechanical engineering problems.

**Keywords:** Computer aided design, programming, finite element modelling.

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