

5th years Class of 2015 Quadrotor project was very inspiring. The project was carried out by Brenda Iivoi and Oduor Joseph supervised by Prof. J.M Ogola

The aim of the project was to develop a low-cost Remote Controlled Aerial Vehicle (RVAV) for delivery of emergency aid. This report therefore gives design of the quadrotor, comprising its architecture and control. Theoretic formulae and parameters guided the design of the quadrotor model as they dictated the starting point of the design. This process of designing the aerial vehicle involved, designing the frame and the propellers using Autodesk Inventor and SolidWorks, and then fabricating the frame designs using laser cutter and 3D printing the propellers. The frame parts were joined together using nuts and bolts. The propellers were mounted on the motor which were fixed on the frame using screws. Electrical components such as control board receivers and connectors were connected as per the circuit design. This demonstrates the ability to build non-commercial, competitive academic platforms for control education through flying vehicles.