

**DESIGN OF A BOW-TIE MICROSTRIP ANTENNA AT FREQUENCY
OF 2.45GHz**

**This thesis is presented in partial fulfilment for the award of the Bachelor of
Engineering Electronic (Communication) with honours.**

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ABSTRACT

In this project, a design of basic bow-tie microstrip antenna is presented with special software. The software used to model and simulate the microstrip antenna is Computer Simulation Technology 2011(CST) on FR4 substrate with dielectric constant of 4.3 and operating frequency of 2.45GHz. A Bow-Tie Microstrip antenna based on the design of equilateral triangular patches formula is designed and focuses on two different angles of 60° and 120° . The general characteristics of antenna such as return loss, gain and radiation pattern were analyzed. The simulation and measurement results are presented. The result shows that the measurement of return loss produce a better performance compared to the simulation with an angle 60° and 120° the measurement increase around 12dB and 7dB respectively.

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