## ABSTRACT

At this final project has done the design and realization of the triangular monopole antenna microstrip-based. This antenna is intended for Ultra Wideband communications applications at frequencies in accordance with the standards Federation Communications Commission is 3.4 GHz to 10.6 GHz with a minimum banwidth  $\geq$  500 MHz or 0.25 Bf at VSWR  $\leq$  1.2.

In the design process conducted trials the influence of angle of the antenna specification with the number of samples as many as six of 45  $^{\circ}$ , 60  $^{\circ}$ , 75  $^{\circ}$ , 90  $^{\circ}$ , 105  $^{\circ}$  and 120  $^{\circ}$ . Based on simulation results, the angle is considered to best meet the expected specifications is an angle of 90  $^{\circ}$ .

After the measurement can be seen that the patch antenna with a 90  $^{\circ}$  angle has a gain of 1.226 dB, and has an elliptical polarized omni directional beam direction.

Keyword : Ultra Wideband, VSWR, triangular patch.