

## **ABSTRACT**

*The FM radio transmitter is a device that can transmit modulation signals transmitted through the air media. Design FM radio transmitter as a learning media that can be used in the Faculty of Applied Sciences. It can also be used as a medium for conveying information such as voice, conversation or music.*

*Design of Radio Transmission Final Project at Frequency transmitter at 94 MHz has sections namely: modulator, oscillator, amplifier, and a monopole antenna. The input signal in the form of Audio Frequency (AF) is a signal modulated Radio Frequency (RF) which is intended as a power output measured using the oscilloscope is then fed to the antenna system to be transmitted, in the manufacture of an FM radio transmitter circuit using Altium software.*

*The results of this final project is to realize Radio Frequency transmitter at 94 MHz and received by the radio receiver to get to the listener. Based on the results of measurements using oscilloscopes including the amplifier output at 94.34 MHz frequency to the value  $V_{pp} = 4.80$  Volt and to antenna using the Network Analyzer with the results of VSWR of 1.1, -24 dB Return Loss measurement results obtained are in the frequency of 94 , 30 MHz. This value meets the parameters of an FM radio transmitter.*

**Keywords: Radio Transmitter, Frequency 94 MHz, Software Altium**