

EENG 481 Final Project

Write a MATLAB program to encode/decode a random stream of information symbols passed through a binary AWGN channel using the extended Golay(24,12) code. Collect actual bit error rate performance for E_b/N_0 ratios ranging from 5.0 to 9.0 dB in 0.5 dB steps. Compare this actual performance to the theoretical uncoded performance and the theoretical bit error rate performance of the extended Golay(24,12) code.

Deliverables:

- MATLAB program source code
- Table of bit error rates for each value of E_b/N_0
- Graph showing actual vs. theoretical performance (uncoded and coded)

