

ABSTRACT

Telecommunication Electronics is one of the subjects in the Telecommunications Engineering D3 Study Program which requires precision in calculating the value of each electronic component. Based on the results of the survey, many Telecommunications Engineering D3 Study Program students who took this course did not understand the material well, especially in power amplifier and oscillator materials, due to lack of interactive learning media. That condition makes students didnt get a good score enough, even doesnt graduated the course. Therefore, students of the Telecommunications Engineering D3 Study Program need other interactive learning methods to improve understanding.

To overcome these problems, the GUI (Graphical User Interface) based Telecommunication Electronics interactive learning module was created. This Telecommunication Electronics learning module focuses on the material that has become a difficulty for students of the Telecommunications Engineering D3 Study Program, namely power amplifiers and oscillators. In designing this learning module using Adobe Flash CS6 application with AS 3.0 programming language.

This final project produced an interactive learning module. The results of functionality testing indicate that all features are functioning correctly. Testing the content of the calculation shows that it is in accordance with the calculation manually. Qualitative test (questionnaire) show the results of an average of 4.34 from 1 - 5 scale, the performance of this learning module is in the good category.

Keywords: Learning Module, Power Amplifier, Oscillator, Adobe Flash CS6