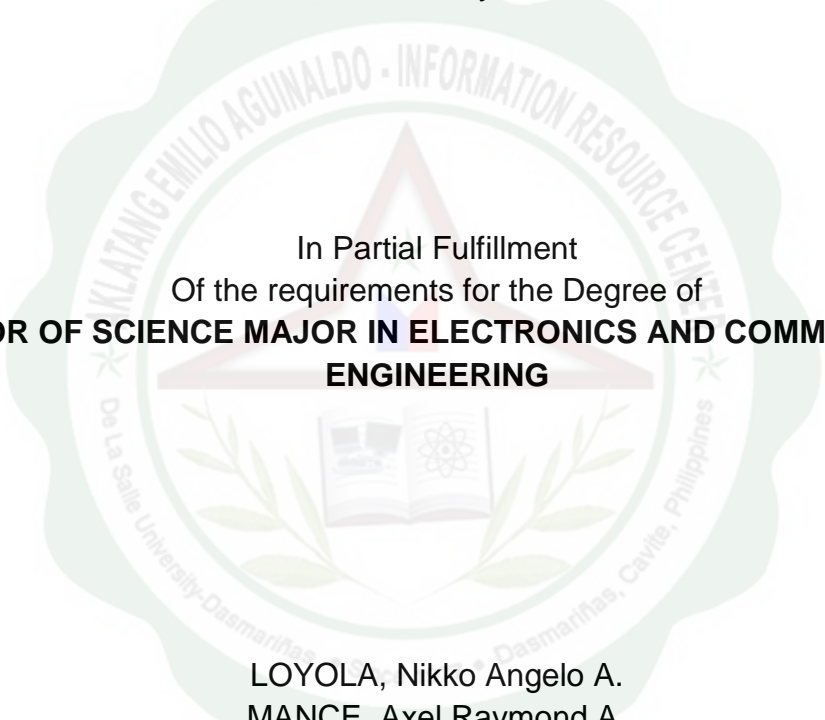


# **DEVELOPMENT OF AN ELECTRICAL TESTING TRAINING MODULE FOR LM741C OPERATIONAL AMPLIFIER**

A Research Final Paper  
Presented to  
The Faculty of the College of Engineering, Architecture and Technology  
De La Salle University – Dasmariñas

The seal of De La Salle University - Dasmariñas is a circular emblem with a scalloped border. It features a central shield with a red triangle at the top, a white book with a gear and a circuit diagram on its pages, and green laurel branches on either side. The text "KILATANG EMILIO AGUINALDO - INFORMATION RESOURCE CENTER" is written in a circle around the top, and "De La Salle University - Dasmariñas, Cavite, Philippines" is written around the bottom. Two stars are positioned on the left and right sides of the seal.

In Partial Fulfillment  
Of the requirements for the Degree of  
**BACHELOR OF SCIENCE MAJOR IN ELECTRONICS AND COMMUNICATIONS  
ENGINEERING**

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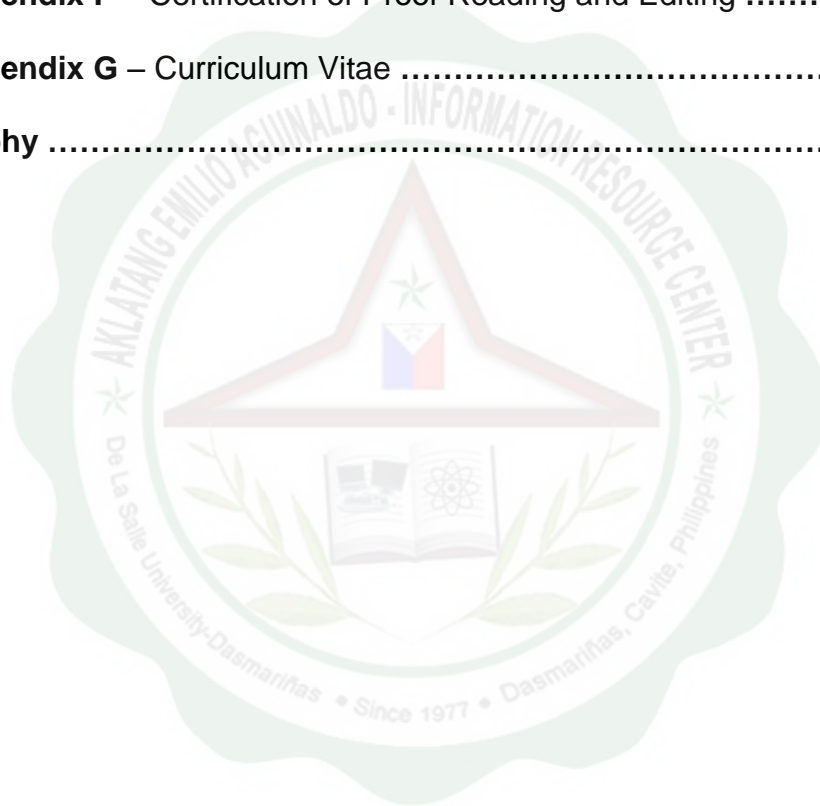
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## **ABSTRACT**

**Research Title:** DEVELOPMENT OF AN ELECTRICAL TESTING TRAINING MODULE FOR LM741C OPERATIONAL AMPLIFIER

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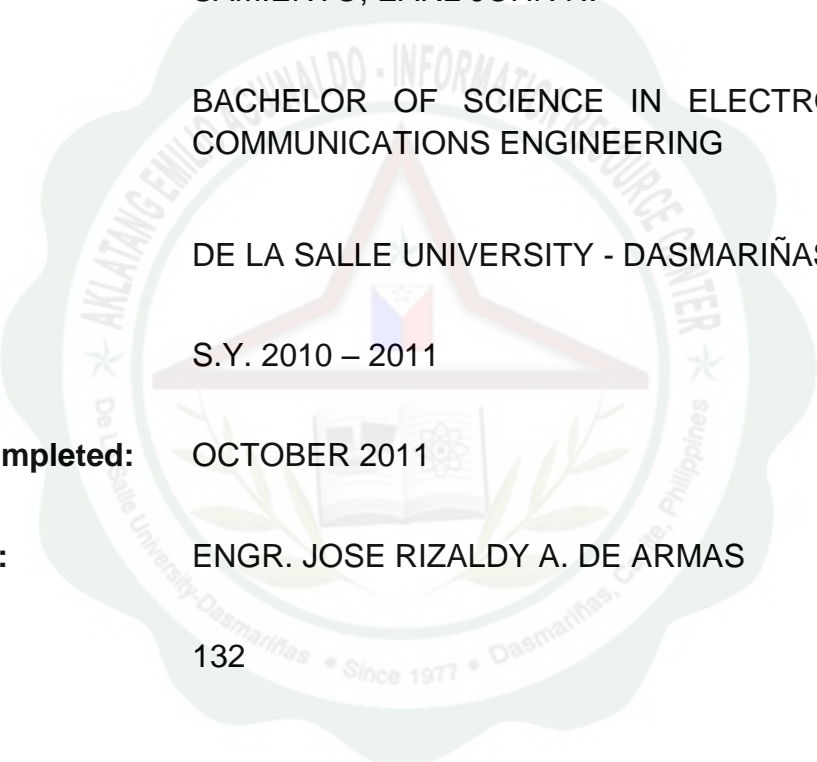
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A large, light green watermark seal of De La Salle University - Dasmariñas is centered in the background. The seal features a central shield with a cross and a book, surrounded by the university's name in a circular border. The text 'AKLATANG ENHAYO - INFORMATIKO' and 'SOURCE CENTER' is visible at the top of the seal, and 'De La Salle University - Dasmariñas • Since 1977 • Dasmariñas, Cavite, Philippines' is at the bottom.



This study focuses on the electrical training module for LM741C Op-Amp. This module is a tool for learning and understanding the significant parameters of LM741C Op-Amp that is being tested in the industry. With this module, people will learn the basic and concepts on how certain parameters of an LM741C Op-Amp will be measured and solved. Together with the module comes an instruction manual that has an easy step by step procedure and formulas to compute and evaluate the LM741C Op-Amp. This module is intended for students taking up ECE to be a foundation and bridge between academe and industry; thru this module the students will appreciate how the theory will be applied in reality. This module was built in the best potential that the group could give. This module is designed to be a user friendly and beneficial for those who will seek knowledge in LM741C Op-Amp. There are setups in each parameter to be measured. These parameters are particularly, Continuity Test, Input Offset Voltage, Input Bias Current, Supply Current, Common Mode Rejection Ratio (CMRR), Power Supply Rejection Ratio (PSRR), and Gain Test. Understanding how these setups are achieved will be an advantage once encountered in the semiconductor industry. This module will help familiarize the students with the test methods being followed and implemented in the industry. This tool could also give an overview for students to know what equipments are found in the industry.