

**THE USE OF FREE SPACE OPTICS (FSO) AS NETWORK BACKBONE  
OF CENTRAL PHILIPPINE UNIVERSITY**

**A Special Problem**

**Presented to**

**The Faculty of the School of Graduate Studies**

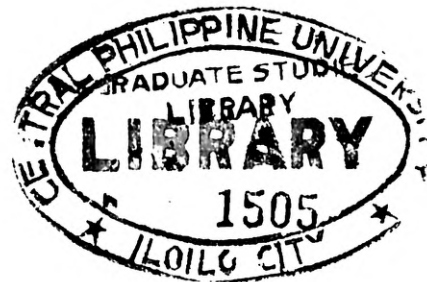
**Central Philippine University**

**Jaro, Iloilo City**

**In Partial Fulfillment**

**of the Requirements for the Degree**

**Master of Engineering**



**By**

**Elmer S. Castante**

**October 2005**

# **THE USE OF FREE SPACE OPTICS (FSO) AS NETWORK BACKBONE OF CENTRAL PHILIPPINE UNIVERSITY**

**Elmer S. Castante, RECE, MCP**

## **ABSTRACT**

This paper aimed to study the Free Space Optics (FSO) technology to be used as backbone of Central Philippine University campus area network. It further aimed to evaluate the existing conditions of the CPU campus area network, assess the technical and economic aspect of FSO, determine the location where FSO transceivers can be installed, and present a cost estimate of the materials to be used in installing FSO. The methodology used in system design is the System Development Life Cycle. It was found out that the existing network backbone of Central Philippine University campus area network is not capable to handle the present and future computing demands of the university. Free space Optics is a cost-effective, easy to install, reliable, and efficient option to answer the problems of the present system.