

## National University of Science and Technology



Think in Other Terms

**FACULTY** 

**Applied Sciences** 

SPECIAL COLLECTION

DEPARTMENT

**Computer Science** 

NAME

**Tawanda Zarura** 

STUDENT NUMBER

P0111900Y

TITLE

A blended cryptographic system for enhancing security in data transmission and storage.

**PROJECT SUPERVISOR** 

Mr. S. Ngwenya

A STATE OF THE PARTY OF THE PAR		
NATIONAL AN P.O. BC	UNIVERSITY OF D TECHNOLOG DX 346 BULAY ZIMB 33 VE	SCIENCE Y VAYO
DATE	ACCESSION	CLASS No
li-	80	
11/05/16	15/858	AND CHARLES OF THE OWNER, THE PARTY OF THE P
DATE	And the state of t	CLASS No



THIS PROJECT IS SUBMITTED TO NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF COMPUTER SCIENCE, IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF BACHELOR OF SCIENCE HONOURS DEGREE IN COMPUTER SCIENCE

**MAY 2015** 

## **ABSTRACT**

Due to the growth of data transmission over computer networks there is need to secure information from unauthorised access during times of transmission. Different techniques were invented to secure data from going into the hands of the unauthorised people. Amongst these techniques are steganography and cryptography. Cryptography makes message unintelligible to unauthorised people, while steganography hides the existence of the message. This project aims at blending steganography and cryptography to improve information security in transit and storage. Rapid Application Development methodology was adopted in this project to develop the system. Unified Modelling Language and Java Eclipse are some of the tools that were used on system implementation. The outcome of this project was blended cryptographic system. This system encrypts and hides data in multimedia files before transmission and storage. It also allows users to extract hidden data from multimedia file and decrypt encrypted data. The blended cryptographic system also comes with a database for storage of files with secured data.