



# **TÉCNICA DEL NORTE UNIVERSITY**

**FACULTY OF ENGINEERING IN APPLIED SCIENCES**

**CAREER OF ENGINEERING IN COMPUTATIONAL SYSTEMS**

**GRADE WORK PRIOR TO OBTAINING THE TITLE OF ENGINEERING IN  
COMPUTER SYSTEMS**

**THEME:**

**“MULTIMEDIA SYSTEM FOR THE ADMINISTRATION OF CONTENTS OF THE  
DIGITAL BILLBOARD OF THE FACULTY OF ENGINEERING IN APPLIED  
SCIENCES”**

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## **SUMMARY**

The constant development of technology and computing has allowed the integration of multimedia in various fields because it is a resource that manages to get the attention immediately through its presentation at strategic points generating a great visual impact on users. According to Coleman (2012) multimedia technology has reached all the fields of society such as: work, culture, leisure and education.

Multimedia applications are involved in most of the fields of human daily life, which implies the use of this technology as a resource that offers combinations of means to optimize times, tasks, work or academic activities in a different way than conventional, making it more attractive and efficient.

The present work has been developed in order to take advantage of the multimedia to present information in an attractive and dynamic way; through the development of a multimedia system that allows manipulating the contents that are shown in the digital billboard of the Faculty of Engineering in Applied Sciences.

The introductory chapter presents a general description of the project, which details the problem, objectives, the scope and justification.

Chapter I, presents more detailed information about multimedia; highlighting its characteristics, advantages and disadvantages; it also provides information on multimedia systems and finally describes digital billboards.

Chapter II, briefly describes all the tools used in the system's development and describes the development methodology Extreme Programming (XP).

Chapter III, describes the whole process of development, implementation and testing of the system following the parameters of the XP methodology. In addition, it shows the analysis of the impact generated by the system's implementation.