



De La Salle University – Dasmariñas

GRADUATE PROGRAM

**REESTABLISHING THE VALIDITY AND RELIABILITY OF THE
QUALIFYING EXAMINATION FOR ENGINEERING STUDENTS
OF DE LA SALLE UNIVERSITY - DASMARIÑAS**

**A Master's Thesis
Presented to
The Faculty of the College of Science Graduate Studies
De La Salle University – Dasmariñas
Dasmariñas, Cavite**

**In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts in Mathematics**

**JAYZEL O. VELASCO- ALAM
MAY 2009**



ABSTRACT

This study anchored on the validity and reliability of the qualifying examination for the engineering students. The study involved second year college students S.Y. 2006 – 2007 and S.Y. 2007 – 2008.

The findings of this study concluded that: (1) there is a need for the reconstruction of the test items of the questionnaire used for the 2007 and 2008 qualifying examination. The validators were able to establish that the test items did not cover specific topics that are considered to be crucial for a particular subject matter and there were test items that were not included in the syllabus which was the basis to test the content validity of the test items; (2) there is need for reestablishing the Table of Specification of the questionnaire used for the 2007 and 2008 qualifying examination. The validators considered the distribution of the test items when grouped according to the Table of Specification as unevenly distributed. The validators pointed out that the level of analysis should have a higher percentage, followed by application, comprehension and the level of knowledge should have the least percentage; and (3) the test for reliability also showed that the test items were not reliable since the Cronbach's alpha were all below the 0.90 level that according to Hopkins should be the lowest coefficient that a qualifying examination should have. A test to be considered valid should be reliable first.