301 **Measurement of Mechanical Work III** April 8, 2001
Course No. Descriptive Title Revision: 2 February, 2003

Course Description

This course is an extension of measurement of Mechanical Work I and II dealing mainly with the work covered in Mechanical Technology III.

Suggested Prerequisites:

. . . . .	101	Construction Science
. . . . .	103	Measurement of Mechanical Work I
. . . . .	104	Plumbing & Fire Protection Design
. . . . .	109	Heating, Ventilation and Air Conditioning Design
. . . . .	201	Mechanical Technology II
. . . . .	202	Measurement of Mechanical Work II
. . . . .	208	Mechanical Technology III

Learning Outcomes

The student will demonstrate a proficiency in measurement of:

1. plumbing systems
2. heating/ventilating/air conditioning systems
3. fire protection systems.

Course Content:

The student will study the following:

1. from the text Means Mechanical Estimating Standards and Procedures
   a. Chapter 3 Before Starting the Estimate
   b. Chapter 4 The Quantity Take-off
2. from the text Means Plumbing Estimating
   c. Chapter 3 Preparing for the Estimate
   d. Chapter 4 The Take-off
3. from the CIQS Method of Measurement of Construction Works.

Required Textbooks and Materials:

1. Method of Measurement of Construction Works, published by the Canadian Institute of Quantity Surveyors
2. Means Plumbing Estimating, by Galeno and Greene
3. Means Mechanical Estimating Standards and Procedures, by Moylan/Mossman.

Testing:

Testing will include elements studied in this course as well as 101, 102, and 201. Emphasis will be placed on:

1. a demonstrated understanding of the methods and procedures
2. accuracy in description
3. accuracy of measurement and extensions.