

# COMPUTERIZED MECHANICAL ESTIMATING

## EVENT DATE

June 11-13, 2019 | 8:30am - 4:30pm

Registration cutoff: May 28, 2019

## LOCATION

Trimble

9131 Keele St, Suite A7, Vaughan, ON

## COST

Non-member: \$2,400.00

MCAC Member: \$1,900.00

(+ 13% HST)

The fee includes a complete and comprehensive manual, a complete set of bid documents, drawings, specifications, addenda, leather bag including calculator and various other supplies needed for the course.

BN# 867668436 RT 0001

## CANCELLATION POLICY

- Thirty (30) calendar days prior to start of course—100% refund
- Fifteen (15) calendar days prior to start of course—50% refund
- Seven (7) calendar days prior to course commencement—No refund
- Substitutions can be made up to the day before the course starts

## HOW TO PAY

Visa, MC, AMEX, Cheque, Invoice

## REGISTRATION

Seating is limited to 10 students.

Mail completed form with payment to:  
Construction Education Council  
701-280 Albert St., Ottawa, ON K1P 5G8  
or fax to 613-235-2793 or email to  
tania@mcac.ca.

Registration is not complete until  
payment has been received.

For more information please contact:

**TANIA JOHNSTON**

tania@mcac.ca

www.constructioneducation.ca



The Computerized Mechanical Estimating course is an introductory course that provides participants with an opportunity to acquire the skills and knowledge to estimate mechanical project costs using Trimble AutoBid Mechanical estimating solutions.

Participants will learn to apply proven principles and methodologies of mechanical (piping) estimating in an instructor-led, hands-on approach. The topics covered focus on key tasks of proven estimating method such as: creating and applying estimate breakdowns, takeoffs of common systems and items, such as fixtures, equipment, drainage waste and vent, pressure and process piping. Participants will use AutoBid Mechanical Estimating and OnScreen software tools during the course.

By the end of the course, participants will submit a bid along with their peers. The course is delivered over three consecutive days.

## LEARNING OBJECTIVES

Upon successful completion of the course, participants will be able to:

- Describe the tasks that comprise the estimating process.
- Accurately describe and review bid documents (i.e. drawings, specifications, bid form and addenda).
- Demonstrate procedures to setting up an estimate.
- Describe the importance of breaking down an estimate into logical and functional breakdowns.
- Correctly perform takeoff of materials in common systems using a systematic approach that emphasizes attention to accuracy and detail.
- Demonstrate the ability to correctly modify takeoff quantities and items.
- Demonstrate an understanding of the process of extending material pricing and labor unit values to an accumulated bill of materials.
- Accurately account for costs of all applicable labor (direct, indirect and incidental), general expenses, subcontractors and quoted material items.
- Demonstrate the ability to submit a final bid which accurately accounts for all costs, overhead and profit.
- Demonstrate a basic proficiency in the use of AutoBid Mechanical estimating software.

## COURSE MATERIAL

All course material for internet-based instruction will be distributed electronically at each scheduled session. Materials for the classroom based instruction will be distributed at the time instruction takes place. Participants will have access to use of Accubid Enterprise Estimating and LiveCount software during classroom based instruction.

## WHO SHOULD ATTEND

Project managers, journeymen, novice estimators, junior estimators and estimators unfamiliar with computerized estimating software.

## PREREQUISITES

The student must have experience working in a MS Windows environment, must possess knowledge of mechanical construction methods, and must possess blueprint reading skills.

*In order to receive the course certificate, students MUST attend all online and in class sessions. A final assignment must also be completed during class time.*



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## COURSE MODULES

### Module 1 – The Role of the Estimator

- Importance of estimating in contracting business
- Principle activities of an estimator

### Module 2 – The Estimating Process

- Estimating defined
- Estimator's responsibility
- The estimating process
- Estimate setup
- Takeoff
- Material and labor extension
- Closing the estimate
- Final pricing

### Module 3 – Initiating Projects

- Assessing risks in bidding
- Reviewing all documents

### Module 4 – Reviewing Bid Documents

- Drawing review
- Surety bonding in the construction industry
- Contract terms and conditions

### Module 5 – Project Specifications

- Specification review
- Specifications format
- Components of specification format
- Request for information process
- The addenda process

### Module 6 - Preparing to Estimate

- Defining estimate breakdowns
- Addressing bid requirements

### Module 7 – Mechanical Equipment Takeoff

- Define what constitutes mechanical equipment takeoff
- Describe the logical order of takeoff items
- Standardization of takeoff process

### Module 8 – Fixture Takeoff

- Define the takeoff process
- Understand the importance of the order in which items get taken off and/or quantified
- Describe the activities in the endorsed takeoff sequence
- Describe the steps required to perform fixture takeoff

### Module 9 – Pipe, Valve and Fittings Takeoff

- Define the takeoff process
- Understand the importance of the order in which items get taken off and/or quantified
- Describe the activities in the endorsed takeoff sequence
- Describe the steps required to perform Pipe, Valve & Fitting takeoff



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## REGISTRATION INFORMATION

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_

City: \_\_\_\_\_ Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Company Contact: \_\_\_\_\_

Company Email: \_\_\_\_\_

*Due to limited space, registration will be processed on a first come, first served basis. Register early to avoid missing out!*

## TYPE OF REGISTRATION

Non-member: \$2,400.00 + 13% HST     MCAC Member: \$1,900.00 + 13% HST

## ATTENDEE INFORMATION

NAME	EMAIL	SUBTOTAL	GST/HST	TOTAL
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1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

## METHOD OF PAYMENT

Cheque     Visa     MasterCard     American Express     Invoice (Members Only)

Card Number: \_\_\_\_\_

Expiration: \_\_\_\_\_

Card Holder Name: \_\_\_\_\_

Signature: \_\_\_\_\_

**Register by fax to 613-235-2793 or email to tania@mcac.ca**

