

# MEMORANDUM

**TO:** Library

**FROM:** Dr. Lotfi Gaafar  
Dean of School of Sciences and Engineering

**SUBJECT:** Master Thesis

**DATE:** December 14, 2021



Please find the attached signed copy of dissertation submitted by Amr Nagui El Mahallaoui in partial fulfillment of M.Sc. degree, which has satisfied the requirements of the Construction Engineering Department and is ready for binding and display in the library.

**Name of student:** Amr Nagui El Mahallaoui

**Department:** Construction Engineering Department

**Advisor:** Dr. Samer Ezeldin

Thesis title: *“FINAL BID PRICE ESTIMATION FOR NEGOTIATED CONTRACTS: BARGAINING GAME THEORY APPROACH”*

CC. Candidate  
Department Chair  
Registrar  
Dean of Graduate Studies

The American University in Cairo  
School of Sciences and Engineering  
Construction Engineering Department

Final Bid Price Estimation for Negotiated Contracts: Bargaining Game  
Theory Approach

A Thesis Submitted by

Eng. Amr Nagui El Mahallaoui

to the Construction Engineering Department

in partial fulfillment of the requirements for the degree of  
Master of Science in Construction Engineering

has been approved by

Dr. Samer Ezeldin (Advisor)

Professor, Construction Engineering Dept., AUC

Dr. Elkhayam Dorra (Advisor)

Adjunct Assistant Professor, Construction Engineering Dept., AUC

Dr. Khaled Nassar (Internal Examiner)

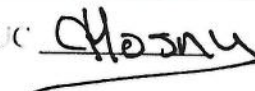
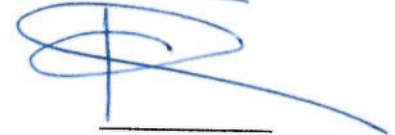
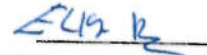

Professor, Construction Engineering Dept., AUC

Dr. Hesham Osman (External Examiner)

Professor, Faculty of Engineering, Cairo University

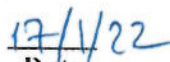
Dr. Ossama Hosny (Moderator)

Professor and Graduate Program Director, Construction Engineering Dept., AUC



December 14<sup>th</sup>, 2021

  
Department Chair

  
Date

  
Dean

Date



THE AMERICAN UNIVERSITY IN CAIRO  
الجامعة الأمريكية بالقاهرة

**Proof of IRB Approval or Waiver for Completed Graduate Thesis**

To be submitted with completed thesis and other forms requested below

All research involving living human beings or bodily tissue samples requires advance approval from AUC's Institutional Review Board (IRB). Each student's thesis advisor is responsible for ensuring that this form is filled in accurately. Until this form is completed and approved, the thesis cannot be posted on DAR, and the student is not eligible to graduate. *Please attach to this form, a copy of the IRB approval letter, the abstract of the student's thesis and thesis copyright and availability form.*

Student Name: Amr Nagui El Mahallawy Email: amrmahallawy@aucegypt.edu

AUC ID # 900130657 Mobile # 01006650259

Department/Unit: Construction Engineering

School: School of Sciences and Engineering

Thesis Title: Final Bid Price Estimation for Negotiated Contracts:  
Bargaining Game Theory Approach

Date: 2/11/2022

Name of Thesis Advisor: Dr. Ahmed Sameh Ezzeldin, Dr. Elkhayam Douca

Thesis Advisor's Email: aezzeldin@aucegypt.edu, edouca@aucegypt.edu

The advisor should check one of the following boxes.

IRB approval has already been obtained for this thesis. (Please attach a copy of the IRB approval letter.)

IRB approval is not necessary for this thesis, since the research is not concerned with living human beings or bodily tissue samples.

Signature of Student: Amr El Mahallawy

Date: 2/11/2022

Signature of Thesis Advisor: [Signature]

Date:

Name and Signature of School Dean:

Dr. Lotfi Gaafar [Signature]

Date:

**Step 1: Student to Department or Program which needs to submit to the Dean of the School:**

- (1) The Proof of IRB Approval /Waiver together with a (2) copy of the IRB approval letter from IRB chair (3) thesis abstract and (4) the thesis copyright and availability form

**Step 2: The Office of the Dean of the School needs to submit to the library:**

The above four documents in addition to (5) the School Dean's memo (6) with the thesis final copy