



Name: Dr. Mohammad Hany Yassin

Rank: Assistant Professor

Title: Acting Head of Civil Engineering Department

Personal Information

Nationality:	Canadian
AU Joining Date:	17 Apr 2016
E-Mail Address:	m.yassin@au.edu.kw

Professional Information

Education:	<ul style="list-style-type: none"> - Ph.D.) Doctorate of philosophy in Civil Engineering ETS, Universite de Quebec Montreal, QC., Canada, 2015 <i>Thesis: Nonlinear Seismic Soil-Pile Interaction Analysis for Bridges Founded In Quebec Soil</i> - Certificate in University Teaching Concordia University, Montreal, QC., Canada, 2012 - (M. A. Sc.) Master of Applied Science in Civil Engineering Concordia University, Montreal, QC., Canada, 2008 <i>Thesis: Post-Earthquake Fire Performance of Building Structures</i> - Bachelor of Engineering B. Eng., Civil Engineering <i>University of Damascus, Damascus, Syria, 2005</i>
Specialization:	<ul style="list-style-type: none"> - Planning and Designing of Bridges - Structural Engineering - Seismic Design of structures - Structures Retrofitting with FRP - Seismic Soil-Structure Interaction
Current Academic Position:	Assistant Professor - Acting Head of Civil Engineering Department
Current Professional Positions:	- Licensed Professional Engineers Ontario (P.E.O. #100134143)

	<ul style="list-style-type: none"> - Member of American Society of Civil Engineering (ASCE #12346916) - Member of Canadian Society of Civil Engineering (CSCE #096454) - Oracle Certified Associate Programmer (OCA) - Member of Syrian Engineers Syndicate, Damascus, Syria
Previous Administrative Position Held:	NA
Previous Academic Positions Held:	<ul style="list-style-type: none"> - 2010-2012 Part-time Faculty Member, Department of Building, Civil & Environmental Engineering, Concordia University, Montreal, QC., Canada - 2006-2009 Teaching Assistant, Department of Building, Civil & Environmental Engineering, Concordia University, Montreal, QC., Canada
Fellowships And Honors:	<ul style="list-style-type: none"> - December 2019 Australian Embassy Award of Wining Project in the College of Engineering in AU, Kuwait - December 2019 Award of Wining Project in the Civil Engineering Department, AU, Kuwait - April 2019 Award of Wining Project in the Civil Engineering Department, AU, Kuwait - 09/2011-05/2015 Research Scholarship, ETS, University de Quebec, Montreal, QC, Canada - 09/2006-04/2009 Teaching Assistantship, Concordia University Montreal, QC., Canada - 09/2006-04/2008 Research Scholarship, Concordia University, Montreal, QC., Canada
Teaching Experience:	<p><u>Summary of Academic Teaching Experience</u></p> <p>Gulf Experience:</p> <ul style="list-style-type: none"> - As an Assistant Professor in the Civil Engineering Department at AU I have taught several courses including Steel Structures, Concrete Design, Analysis of Structure, Solid Mechanics, Hydraulics, supervised and led several research projects. <p>Canadian Experience:</p> <ul style="list-style-type: none"> - Concordia University, Canada (Part-time Faculty): Building Project Design, Civil Project Design, - Concordia University, Canada (Auxiliary Teacher) Applied Ordinary Differential Equations, Design of Reinforced Concrete Structures, Introduction to Structural Dynamics, Mechanical Analysis, Mechanics of Materials, Numerical Methods in Engineering, Probability and Statistics in Engineering, Statics, Structural Analysis II, Thermodynamics I <p>Syrian Experience:</p> <ul style="list-style-type: none"> - I have worked as a professional instructor at several institutes for subjects as Engineering Drawings, Programing for Engineering Applications using Java, VBA for Engineering Applications, Oracle Data PL/SQL Programming. <p><u>Details of Teaching Experience</u></p> <ul style="list-style-type: none"> - Steel Structures, AU, from Fall 2022, until present - Concrete Structures, AU, Summer semesters 2021, 2022

	<ul style="list-style-type: none"> - Analysis of Structure, AU, from Summer 2016, until present - Strength of Materials, AU, Fall 2016 & Spring 2017 - Solid Mechanics, AU, Summer semesters from 2015 till 2022 & Spring 2017 - Civil Construction, AU, Fall 2016 - Engineering Materials, AU, Summer 2016 - Project Based Learning units, AU, Summer 2016 until Spring 2017 - Building Project Design, Concordia University, Fall 2010 & Fall 2012 - Civil Project Design, Concordia University, Fall 2010 & Fall 2012 - Applied Ordinary Differential Equations, Concordia University, Fall 2011, Auxiliary Teaching - Building Eng. Design Project, Concordia University, Fall 2007, Winter 2007, Winter 2008, Summer 2010, Auxiliary Teaching - Civil Eng. Design Project, Concordia University, Fall 2007, Winter 2008, Summer 2010, Auxiliary Teaching - Design of Reinforced Concrete Structures, Concordia University, Fall 2008, Auxiliary Teaching - Introduction to Structural Dynamics, Concordia University, Winter 2009, Auxiliary Teaching - Mechanical Analysis, Concordia University, Winter 2006, Auxiliary Teaching - Mechanics of Materials, Concordia University, Winter 2006, Winter 2007, Winter 2008, Auxiliary Teaching - Numerical Methods in Engineering, Concordia University, Winter 2009, Auxiliary Teaching - Probability and Statistics in Engineering, Concordia University, Fall 2008, Auxiliary Teaching - Statics, Concordia University, Fall 2006, Fall 2009, Winter 2009, Auxiliary Teaching - Structural Analysis II, Concordia University, Winter 2008, Winter 2009, Auxiliary Teaching - Thermodynamics I, Concordia University, Summer 2010, Auxiliary Teaching - Oracle Programming PL/SQL, SBS, 2003-2004, Instructor - Oracle SQL, SBS, 2003-2004, Instructor - Ms. Project, SBS, 2001-2003, Instructor
<p>Industrial And Technical Experience:</p>	<p>04/2013-12/2015 Bridge Engineer <u>International Bridge Technologies (SYSTRA-IBT)</u> Montreal, QC., Canada</p> <p><i>Assigned Tasks:</i> Efficiently accomplished all assigned tasks encompassing the analyses and design of bridges and general transportations structures including the following:</p> <ul style="list-style-type: none"> – Performing structural design of roadway bridges – Participating in the technical perpetration of proposals – Coordinating production of relevant drawings and their release for the execution of the work

- Supervision of junior engineers and technicians
- Supporting the review and checking of bridge design including BOQ and shop drawings
- Correspond to the comments of the reviewers and checkers
- Prepared technical reports
- Attend client meetings
- Attending staff meetings
- General administration work

**04/2009 -
03/2013**

Structural Research Engineer

DRSR, École de technologie supérieure (ÉTS)

Montreal, QC., Canada

*Assigned
tasks:*

Worked on bridge projects administered and funded by the ministry of transportation of Quebec (Ministère des Transports du Québec) in which I performed the following tasks:

- Analyzed and studied bridge structures in accordance with the CHBDC (CAN-S6-06).
- Performed 3D modeling for bridge structures with SAP2000
- Seismic rating for deteriorated bridge structure
- Performed soil-structure interaction modeling and calculations for shallow and deep footings
- Developed several designing excel sheets as per the CAN-S6 and AASHTO
- Sample Project: Structural rating of the Île d'Orléans Bridge (100-year-old Cable Stay bridge in Quebec City)

Details of Sample Mega Projects

New Champlain Bridge Corridor Project (November 2014- 2016)

Montreal, Quebec, Canada

- Participated in the proposal phase and the final design of the new Champlain bridge. During this project I performed the following tasks:
- Designed the super structure of the east approach (340m total length and 110m in the main span) as per the Euro Code, the CHBDC and project specifications.
- Designed the intermediate pier diaphragms for the road ways and the Transit corridor.
- Interpreted design requirements and specifications as per the project specifications and design codes.

- Prepared structural models in order to determine design actions.
- Prepared design calculations report and Excel sheets.
- Detailed members and connections to comply with the project specifications, the design codes and standards.
- Coordinated with project team.
- Supervised drafting and checked drawings

Goethals Bridge Replacement (January 2014-October 2014)

New York / New Jersey, USA

Performed independent design check for the bridge approach that includes four roadway structures and one railway bridge. The work consisted of checking the design of the roadway New York north bound and south bound, New Jersey north bound and south bound, and the Travis Spur railway bridge. During the project I performed the following tasks:

- Checked the design compliance with project specifications
- Checked the design compliance with the code and standards
- Prepared design check calculation.
- Built computer models and determined design actions.
- Performed several types of analyses (linear, nonlinear, static, dynamic, influence line, P-delta).
- Conducted special studies for local design and details.
- Prepared written reports
- Attended project meetings and participated in design conferences.
- Checked drawings and specifications compliance.

The Ohio River Cable-stayed Bridge (April 2013- December 2013)

Ohio, USA

In this project I conducted an independent check on the main cable-stay bridge in which I performed the following tasks:

- Assisted in building the bridge computer models.
- Integrated the soil-pile interaction in the global model. Calculated the p-y curves and defined nonlinear springs in the global model
- Independent design check for the bridge substructure and foundation
- Independent design check for the floor beams and deck slab (transverse design check)
- Independent design check for the cable stay-girder anchorage assembly (FEA model)
- Independent design check for the girder and beams web opening, welds and splices.

Research Interest:	<ul style="list-style-type: none"> - Evaluation and Design of Bridge Structures; including Cable-Stayed, Box Girder and Pre-Stressed Concrete and Steel Bridges - Civil Engineering Materials - Performance of Structures under Extreme Loading; including Impact - Rehabilitation of Structures using FRPs - Performance of Structures Strengthened with FRPs - Structural Performance of Buildings under Fire - Data mining and AI applications in civil engineering
Research Grants:	<ul style="list-style-type: none"> - 2020 – 2022 - Two KFAS Research Funds (PN20-35EV and PR20-15EE-01) - 2018-2019 AU research grant -RC-2017-18-SOE-CE-PR03 - 09/2011-05/2015 Research scholarship, ETS, University de Quebec, Montreal, QC, Canada - 09/2006-04/2009 Teaching Assistantship, Concordia University Montreal, QC., Canada - 09/2006-04/2008 Research scholarship, Concordia University, Montreal, QC., Canada
Research and Publications including Journal and Books:	<ul style="list-style-type: none"> - Investigating the drivers and acceptance of sustainable materials in Kuwait: A case study of CEB- DOI: 10.1016/j.cscm.2022.e01330 - Out-of-Plane Structural Performance of Compressed Earth Block Walls Subject to Quasistatic Loading - DOI: 10.1016/j.cscm.2022.e01330 - Modeling the Rutting Behavior of Asphalt Mixtures Obtained by Accelerated Testing Device”, Gulf Conference on Sustainable Built Environment,2019, ISBN: 978-3-030-39733-3 - Seismic Soil-Pile Interaction Analysis for Bridges Founded in Quebec Soil, University of Quebec (Canada) 2015 - Post-earthquake Fire Performance of Building Structures, Concordia University (Canada) 2008
Paper Presentations at Professional Conferences:	<ul style="list-style-type: none"> - Experimental Study on the Thermal Characterization of PTF Concrete- DOI: 10.11159/iccste22.188 - Preliminary Study on the Effect of Adding Palm Tree Fronds to Concrete DOI: 10.11159/iccset22.189 - Optimizing the Thermal Resistance of Concrete Using the PTF Fibers, CIC 2020, Doha. University of Qatar - Assessment of Post-Earthquake Fire Performance of Steel-Frame Buildings 14th World Conference on Earthquake Engineering, Beijing, China October 2008 - Numerical Model for Assessing the Post-Earthquake Fire Resistance of wood-stud wall CSCE 2009 Annual General Conference, St. John’s, Newfoundland, and Labrador May 2009 - Structural Performance of Stud Walls under Normal and Post-Earthquake Fire Exposure The 2008 ASCE and SEI Structures Congress, Vancouver, Canada April 2008
University Service including committee Membership:	<ul style="list-style-type: none"> - As an Acting Head of Civil Engineering Department at AU, I have served on the following committees:

	<ul style="list-style-type: none"> ○ Validation & Moderation Committee (member 2016-2021, Chair 2022 onward) ○ Curriculum Committee (member 2020-2021, Chair 2022 onward) ○ Credit Transfer (CT) Committee (member 2020-2021, Chair 2022 onward) ○ PBL Committee (Chair 2022 onward) ○ Students Appeals & Complaints Committee (Chair 2022 onward) ○ Labs & Workshop Committee (Chair 2022 onward) ○ Research & Faculty Development Committee (Chair 2022 onward) ○ Auditing & QM Committee (Chair 2022 onward) ○ Accreditation Committee (Chair 2022 onward) ○ Departmental Disciplinary Committee (Chair 2022 onward) ○ Academic Promotion and Appointment Committee (Chair 2022 onward) ○ Structural units Committee (Member), Civil Engineering Department, AU, 2017-2019 <p>- Academic Advisor, Civil Engineering Department, AU, 2017-present</p>
National Service:	NA
University Committees:	Distance Learning Committee (AU, 2020) (Member)