

2022

Flexural Behavior of Recycled Concrete Beams Strengthened with CFRP

By: Ola Adel Ramadan Hemida – M. Sc. – 2022

Supervisor(s): Dr. Hany Abdallah

(Beam, Recycled, CFRP, Laminates, Flexural behaviour)

Seismic Performance of Reinforced Concrete Buildings with Viscous Dampers

By: Andrew Aiad Seif Sidhom – M. Sc. – 2022

Supervisor(s): Dr. Sherif Murad, Dr. Hazem El-Anwar

(Viscous dampers, Energy dissipation, Nonlinear analysis, Time history analysis, Eccentricity)

Evaluation of the Response Modification Factor for Different Column Shaped Concrete Frames

By: Amr Mohamed Abdulrahman EL Kayali – M. Sc. – 2022

Supervisor(s): Dr. Walid Attiya

(Non-Linear static analysis (Pushover analysis), Response modification factors, Ductility factor, Overstrength factor, Reinforced concrete frames)

Assessment of BIM Technology Implementation in Egyptian Construction Industry

By: Haya Hany Farouk Kamel – M. Sc. – 2022

Supervisor(s): Dr. Sherif Murad, Dr. Mahdy Marzouk, Dr. Mohammed Serror

(Construction industry, BIM uses, BIM adoption benefits and adoption barriers, Statistical analysis)

Shear Behavior of Repaired Recycled Aggregate Concrete Beams Using CFRP Sheets

By: Abdelaziz Magdy Abdelaziz Elsayed – M. Sc. – 2022

Supervisor(s): Dr. Hany Abdallah, Dr. Mohamed Samy

(Shear strength, Repaired beams, Recycled coarse aggregate (RCA), Carbon fiber-reinforced polymers (CFRP))

Evaluation of the Lean Manufacturing One-Piece Flow in Residential Construction Projects

By: Moheb Samir Habib – M. Sc. – 2022

Supervisor(s): Dr. Azza Abou-Zeid, Dr. Dina Saad

(One piece flow, Lean management, Value stream mapping, Zero wastes, Batch production)

Behavior of Reinforced Concrete Beams with a Hybrid System of poly propylene fibers and Continuous Steel Fibers

By: Mohamed Salah Ahmed Sallam – M. Sc. – 2022

Supervisor(s): Dr. Ahmed Ragab, Dr. M. Ismail Abdul Aziz, Dr. Khaled El-Kashif

(Reinforced, Concrete, Poly Propylene fiber, Continuous steel fiber, Hybrid system)

Effect of Openings on Punching Behavior of Flat Slabs

By: Ibrahim Mahmoud Abdel-Aziz Ahmed Eliwah – M. Sc. – 2022

Supervisor(s): Dr. Mohamed Rabie

(Flat slab, Punching shear, Opening, Critical section, Slab-column connection)

Optimization of Post-tensioned Slabs

By: Abdulrahman Kamal Mahmoud Saleh – M. Sc. – 2022

Supervisor(s): Dr. Youssef Rashed, Dr. Ahmed Fady

(Automated design, Structural optimization, Post-tensioned slabs, Value engineering)

Life-Cycle Optimization of Facility Management for Residential Communities in Egypt

By: Saleh Muhammed Saleh – M. Sc. – 2022

Supervisor(s): Dr. Hesham Osman, Dr. Dina Saad

(Operating expenditures, Capital expenditures, Facility management, Life cycle costing, Managerial span of control)

Axial Behavior of Strengthened Cold Formed Square Hollow Section by Carbon Fiber

By: Nora Tarek Mohammed – M. Sc. – 2022

Supervisor(s): Dr. Hazem Ramadan, Dr. Nader Khalil

(Square hollow section(SHS), Carbon fiber reinforced polymers (CFRP), Local buckling, Ultimate load, Slenderness ratio)

Torsion Behavior of Recycled Aggregates Concrete Beams With Openings

By: Yahia Mohy El-deen Mostafa – M. Sc. – 2022

Supervisor(s): Dr. Hany Abdallah

(Recycled aggregate, R.C beams, Opening, Rotation angle, Torsion, Torque)

Impact of the Arc Jacketing on the Seismic Vulnerability of Skewed Bridge Piers

By: Omar Essam Mohammed Abd-Allah – M. Sc. – 2022

Supervisor(s): Dr. Sherif Murad, Dr. Mostafa Elsayed

(Reinforced concrete, Skewed bridge piers, Dynamic time history analysis, RC jacketing, Fragility analysis)

Flexural Behavior of Recycled Aggregate Reinforced Concrete Beams

By: Ahmed Ewais Sayed Darwish – M. Sc. – 2022

Supervisor(s): Dr.Hany Abdallah

(Recycled coarse aggregate, Natural aggregate, Flexural behavior, Experimental study, Reinforced concrete beams)

Technology of Producing Ultra-High Strength Hybrid Concrete

By: Osama Ahmed El-Sayed Hassan – M. Sc. – 2022

Supervisor(s): Dr.Ahmed Ragab

(Slag, Silica fume, Fly ash, Ultra high strength concrete, Mechanical properties)

Analysis of RC Beams with Openings Strengthened with CFRP

By: Hadeer Hosny Ali Abd El Salam – M. Sc. – 2022

Supervisor(s): Dr.Hany Abdallah, Dr. Ahmed Elansary

(Reinforced concrete, Beams, Openings, Finite element, CFRP)

Important Aspects in Modeling Tall Building in Dynamic Analysis

By: Mohamed Ehab Salah Eldin – M. Sc. – 2022

Supervisor(s): Dr. Youssef Rashed, Dr. Ahmed Fady

(Boundary element method, Finite element method, Dynamic analysis, Modeling aspects, Tall buildings)

Retrofitting of Skewed RC Bridge Bent Using Buckling Restrained Braces (BRB)

By: Kareem Mohammed A. El-Fattah – M. Sc. – 2022

Supervisor(s): Dr. Sherief Murad, Dr. Mostafa El-Sayed

(Seismic, Pushover, Time history, Fragility analysis, Hysteresis)

Numerical Study on Screwed Connections for Sheathed Cold-Formed Steel Walls with Fiber-Cement or Gypsum Panels

By: Nouran Mahmoud Tawfik Esmat – M. Sc. – 2022

Supervisor(s): Dr. Metwally Abu-Hamd, Dr. Raafat Shaker

(Screw connections, Sheathing panels, Experimental investigations, Finite element analysis, Plastic damage model)

Behavior of Fully Encased-High Strength Concrete Composite Columns Subjected To Axial and Cyclic Loads

By: Ahmed Said Abdelazim Elbably – M. Sc. – 2022

Supervisor(s): Dr. Adel Akl, Dr. Osman Ramadan, Dr. Naser Zenhom

(Encased steel-concrete column, Cyclic load, High strength concrete, Ductility, Hysteretic behavior)

Financial Assessment of Construction Companies using Machine Learning Approach

By: Osama Salah Mohammed Abdelrahman – M. Sc. – 2022

Supervisor(s): Dr. Maged Georgy, Dr. Atef Abdel Moghni

(Artificial intelligence, Un-Supervised learning, K-Means neighbor, Performance evaluation, Clustering)

Digital Information Management of Construction Projects Using Block chain Approach

By: Kareem Adel Abdelmoniem Ibrahim – Ph.D. – 2022

Supervisor(s): Dr. Mahdy Marzouk, Dr. Ahmed Abdelmoty Elhakeem

(Information management systems, Blockchain, IPFS, Chatbots, Serverless computing)

Adhesive Behavior of Slag Based Geopolymer Paste Modified With Metakaolin and Silica Fume

By: Tayseer Zakaria Mahmoud Mohammed – M. Sc. – 2022

Supervisor(s): Dr. Ahmed Ragab

(Geopolymer; metakaolin; silica fume; slag; repair applications)

A Numerical Investigation of the Cyclic Response of Replaceable Fuse in Hybrid Coupling Beam

By: Mohamed Sarwat Osman – M. Sc. – 2022

Supervisor(s): Dr. Sherif Murad, Dr. Manar Hussein

(Hybrid coupled wall system, Steel coupling beam, Replaceable fuse beam, Central link, Cyclic load)

Proposed Design Aid Curves For Two Way Post-Tensioned Flat Slabs According to the Egyptian Code of Practice

By: Ahmed Gamal El-Din Galal Sadek – M. Sc. – 2022

Supervisor(s): Dr. Ahmed Ragab

(Post-tensioned slabs, Design aid curves, *ADAPT builder* software, Span To depth ratio, Egyptian Code of Practice)

Comparative Study on Different Modeling Techniques for Cable- Stayed Bridges and Their Effect on the Structural Behavior under Static Loads

By: Mahmoud Said Ahmed Elnahla – M. Sc. – 2022

Supervisor(s): Dr. Walid Attiya

(Cable-stayed, Cable pre-tension, spine model, Shell model, Finite element)

Coupled Analysis of Super-Structure for Advanced Foundation Modeling

By: Aly Medhat Aly Abdou – M. Sc. – 2022

Supervisor(s): Dr. Youssef Rashed, Dr. Ahmed Fady

(Coupling super and sub-structure, Advanced foundation modeling, Elastic half space, Boundary element method, Finite element method)

Shear Behavior of Reinforced Concrete Beams Strengthened with Frp Sheets

By: Mostafa Mohsen Abdul-Aziz Abdul-Aziz – M. Sc. – 2022

Supervisor(s): Dr. Hany Abdallah

(Shear strengthening, FRP strengthening, Assessment of FRP design codes, Reinforced concrete, Beams finite element model)

Strengthening of T-Joints in Double Chord Hollow Section Vierendeel Trusses

By: Mohammed Maher Mohammed – M. Sc. – 2022

Supervisor(s): Dr. Ashraf Osman

(Vierendeel trusses, Strengthening of T joint, Double hollow section chord)

Experimental Study on Fatigue Behavior of CFRP-Strengthened Cracked Steel Plates under Eccentric Axial Tension

By: Mohamed Ahmed Sedkey – M. Sc. – 2022

Supervisor(s): Dr. Mohammed Sorour

(Fatigue loading, Cracked steel plates, CFRP laminates, CFRP sheets, Eccentric axial tension)

Numerical Study on Seismic Behavior of HSS Moment Resisting Connections

By: Sarah Osama Abdel-Ghafour Hodhod – M. Sc. – 2022

Supervisor(s): Dr. Mohammed Sorour, Dr. Hazem Alanear

(Hollow steel section, Moment frame, Moment connection, Cyclic loading, Reduced beam section)

Shear Behavior of Reinforced Concrete Beams Reinforced with Engineered Cementitious Composites and Polypropylene

By: Khalifa Ahmed Elrashidy – M. Sc. – 2022

Supervisor(s): Dr. Mohammed Eissa, Dr. Mohammed Abd Elghaffar

(Shear strength, PVA fiber, Polypropylene fiber, Hybrid fibers, Silica fume)

Assessment of Climate Changes Impact on Coastal Vulnerability for Feasibility of Developing New Communities

By: Shima Sayed Mohamed Azab – Ph.D. – 2022

Supervisor(s): Dr. Mahdy Marzouk

(Climate changes, Coastal vulnerability, Adaptation strategies, Geographic information system, Decision support system)

Strengthening of Post-Tensioned Concrete Slabs using CFRP Sheets

By: Wassim Badri Domat – Ph.D. – 2022

Supervisor(s): Dr. Hany Abdallah, Dr. Ashraf Shawky, Dr. Ghada Diaa

(Unbonded post-tensioned concrete slabs, prestressed concrete, strengthening; CFRP sheets, Flexural behavior)

Finite Element Analysis of Steel Beam to Column End Plate Joints Subjected to Blast Like Loads

By: Ahmed Abdul Aziz Osman – Ph.D. – 2022

Supervisor(s): Dr. Sherif Murad

(Extended end-plate joint, Finite element analysis, Pretensioned bolts, Blast load, Pressure-impulse diagram)

Behavior of Concrete Slabs Reinforced with Welded Wire Mesh under Different Vertical Loads

By: El-Sayed Salah El-Sayed El-Mahdi Ewida – Ph.D. – 2022

Supervisor(s): Dr. Akram Torkey, Dr. Nasser El-Shafey, Dr. Rasha Senousi

(Solid slab, Welded metal mesh, Crack, Ductility, ABAQUS)

Flexural Strengthening of Normal Strength Self Compacted RC Beams

By: Kerollos Magdy Rashid Soryal – M. Sc. – 2022

Supervisor(s): Dr. Ahmed Ragab

(CFRP rods - GFRP rods – CFRP plates – Flexural strengthening – BFRP rods)

Effect of Stages of Construction on the Behavior of Post-Tension Slabs in High-Rise Buildings

By: Abdullah Magdi Ahmed Abdelhameed – M. Sc. – 2022

Supervisor(s): Dr. Adel El-Attar , Dr. Ahmed Elansary

(Staged-construction analysis, High-rise building, Post-tension floors, Differential axial shortening, Time dependent effects)

Influence of Waste Materials on Concrete Mixes Properties

By: Deyaa Eldin Hassan Fikry El-Sabbahy – M. Sc. – 2022

Supervisor(s): Dr. Ahmed Ragab

(Tyres waste – Black toner waste – Mortar mixes – Compressive Strength – Color toner waste)

Impact of Utilization of Slag Based Geopolymer Compared to Fiber-Reinforced Slag Based Geopolymer in Terms of Mechanical and Physical Properties

By: Amr Tarek Abdelsalam Khalil – M. Sc. – 2022

Supervisor(s): Dr. Ahmed Ragab

(Slag geopolymer Polypropylene fiber, Glass fiber, Fiber reinforced geopolymer concrete, Green geopolymer concrete)

Seismic Performance of Steel Frames with Masonry Infill

By: Ahmed Abdallah Bedir Abdallah – M. Sc. – 2022

Supervisor(s): Dr. Sherif Murad , Dr. Manar Hussein

(Infill walls, pushover analysis, Time history analysis, Soft story, Steel frame)

Non-Linear Analysis of Steel Buildings with Optimization of Damper Placement

By: Ismail Ibrahim Ismail Amara – M. Sc. – 2022

Supervisor(s): Dr. Sherif Murad, Dr. Hazem El-Anwar

(Structural dynamics, Inelastic behavior, Tuned mass damper, Nonlinear energy sink, Genetic algorithms)

System Dynamics Approach to Simulate the Impacts of COVID-19 on Cost Overruns and Time Delay of Construction Projects

By: Ahmed Gamal Mohamed Mohamed – M. Sc. – 2022

***Supervisor(s):* Dr. Hesham Osman**

(Construction, System dynamics, Survey, Cost overruns, Time delay)

Optimizing the Types of Percentage of Super Plasticizer in Hybrid Nano-Materials Concrete Subjected To Corrosion

By: Mahmoud Rashwan Ahmed Said Dowidar – M. Sc. – 2022

***Supervisor(s):* Dr. Ahmed Ragab , Dr.Mohammed El-Feky**

(Nano silica, Carbon nanotubes, Corrosion resistance, Bond strength, Sonication)

Mechanical Properties and Durability of Fiber Reinforced Alkali Activated Slag Concrete Compared to Ordinary Portland Cement Concrete

By: Mohamed Hosny Hassan Mohamed El-Sharif – M. Sc. – 2022

***Supervisor(s):* Dr.Walid Attiya**

(Response modification factor, RC shear wall, Multi-layer shell, Nonlinear analysis, Dual systems)

Maintaining Power Plants Components Using 3D Laser Scanning and Deep Learning Approach

By: Nasreldin Hassan Mohamed El-Bendary – Ph.D. – 2022

***Supervisor(s):* Dr. Mahdy Marzouk**

(BIM, Deep learning, Point cloud classification , Neural network, Power plant maintenance)

Design of Geopolymer Composites for 3D Printing Application

By: Passant Ahmed Mohammed Mohammed Youssef – Ph.D. – 2022

***Supervisor(s):* Dr.Ahmed Ragab**

(Metakaolin, Geopolymer, 3D Printing, Additive manufacturing)

Flexural Behavior of 3D Sandwich Composite Panels

By: Ramy Abdel Raheem Ali Mohamed – Ph.D. – 2022

***Supervisor(s):* Dr.Ahmed Anis, Dr.Mohammed Abdelaziz**

(3D Composite sandwich panels, Precast sandwich panels, Insulated panels, Floor panels, Shear connectors)

Analysis and Design of Non-Slender Steel Oval Hollow Section Subjected to Eccentric Axial Loading “

By: Mohammed Sayed Abd Elaty Elsayed – Ph.D. – 2022

***Supervisor(s):* Dr.Sherif Safar**

(Non-slender steel, Steel oval hollow section, Eccentric axial loading)

Modeling Museums Emergency Evacuation Using Agent-Based Simulation and Proximity Analysis

By: Fatma Tarei Hassan Abdou – M. Sc. – 2022

***Supervisor(s):* Dr. Mahdy Marzouk**

(Emergency evacuation, Agent-based simulation, Multi-criteria decision-making, Performance assessment)

Exploitation Blockchain and BIM Technology in Developing Construction Smart Contracts

By: Mohamed Adel Mahmoud Kamel – M. Sc. – 2022

Supervisor(s): Dr. Mahdy Marzouk, Dr. Emad Bakhoum

(Cashflow management, Construction contracts, Blockchain, Smart contracts, BIM)

Evaluation of Seismic Behavior for Concrete Structures Reinforced with CFRP and GFRP Bars Using Applied Element Method

By: EL-Saeed Ahmed EL-Saeed Zyadah – M. Sc. – 2022

Supervisor(s): Dr. Hamed Hadhoud

(FRP reinforced concrete structures, Carbon fiber, Glass fiber, Ductility, AEM)

The Properties of Geopolymer Concrete Based on Fly Ash

By: Abdelrahman Mohammed Mahmoud Hussein – M. Sc. – 2022

Supervisor(s): Dr. Ahmed Ragab

(Geopolymer, Fly ash, mechanical properties, bi-product, meta-kaolin)

Mechanical Properties and Durability of Fiber Reinforced Alkali Activated Slag Concrete Compared to Ordinary Portland Cement Concrete

By: Ahmed Hamed Anwar Mohamed El-Deeb – M. Sc. – 2022

Supervisor(s): Dr. Ahmed Ragab

(Geopolymer concrete, Alkali-activated slag concrete; Polypropylene; Mechanical properties)

Semi-Automated Software Tool for Seismic Performance Based Assessment of Building

By: Mohamed Mohy Eldeen Hassan Ahmed – M. Sc. – 2022

Supervisor(s): Dr. Youssef Rashid

(Seismic performance-based assessment, Fema P-58, Pact Engine, SPO2IDA, Fragility functions)

Investigation of Properties of Fresh and Hardened Self-Compacting Concrete Containing Untreated and Treated Waste Tire Rubber Particles

By: Ahmed Bayomei Semida Bayomei – M. Sc. – 2022

Supervisor(s): Dr. Hossam Hodhod

(Self-compacting concrete, Waste tire rubber, Caustic soda, Workability, Recycling)

A New 3D Time-Stepping Transient Fundamental Solutions with Applications

By: Amr Ashraf Ibrahim Ibrahim – M. Sc. – 2022

Supervisor(s): Dr. Youssef Rashed, Dr. Mohsen El Attar, Dr. Ahmed Fady

(Boundary element method, 3D-dynamics; Transient fundamental solutions, Domain integral treatment, Non homogeneity)

Analysis of Shear Behavior for Various Designed Configurations of Wythe Ties In Precast Concrete Sandwich Panels

By: Mohamed Fahmy Mostafa Mohamed El-Baraga – Ph.D. – 2022

Supervisor(s): Dr. Walid Attiya, Dr. Hatem Hassan

(Shear connector, Shear test, Fiber reinforced polymers, Wythe ties, Flexural behavior, precast concrete sandwich panels)

Use of Model Calibration Technique to Drive Accurate Fragility Curves

By: Omar Khaled Wahba Metwally Omar – M. Sc. – 2022

Supervisor(s): Dr. Shrief Murad, Dr. Hazem El-Anwar, Dr. Hossam Mahmoud

(Fragility analysis, Multiple stripes analysis, Model updating, Finite element modeling, Buckling restrained bracing)

Strengthening of RC Beams with Openings Subjected To Torsion Using CFRP

By: Amar Mohamad Diao Zarzour – M. Sc. – 2022

Supervisor(s): Dr. Hany Abdallah

(RC beams, Repairing, CFRP, Torque, Rotation angle)

Seismic Performance of Self-Centering Steel Plate Shear Walls

By: Khalid Hossam Mohammed Al-Derdaby Al-Kady – M. Sc. – 2022

Supervisor(s): Dr. Ashraf Osman , Dr. Hazem El-Anwar

(Self-centering, Steel plate shear walls, Post-earthquake repair, Web-panel aspect ratios, Nonlinear dynamic analysis)

Shear Strengthening of Normal Strength Self Compacted RC Beams

By: Bishoy Samih Ishak Hanna – M. Sc. – 2022

Supervisor(s): Dr. Ahmed Ragab

(Shear-strengthening, CFRP, GFRP, Steel-plates, Anchorage)

Framework for Maintaining Heritage Buildings in Egypt

By: Hoda Abdel Rahman Abdel Raouf Mohamed – M. Sc. – 2022

Supervisor(s): Dr. Mahdy Marzouk

(Heritage buildings, Statistical analysis, Analytical hierarchy process, Maintainability index)

Lateral Torsional Buckling of Steel Delta Flange Girders

By: Randa Atef Hassan Ahmed Ismail – M. Sc. – 2022

Supervisor(s): Dr. Hazem Ramadan, Dr. Sherif Safar

(Lateral torsional buckling, Delta stiffeners, Finite element, Non-linear, Delta flange girders)

The Effect of Using Nano Titanium as a Partial Replacement of Cement on the Mechanical Properties and Photocatalytic Properties of Mortar

By: Rania Adel Ali Khalil – M. Sc. – 2022

Supervisor(s) : Dr.Ahmed Ragab, Dr. Ismail Serag , Dr.Hala Gamal El-Din

(Nano material, Nano titanium, Agglomeration, Dispersion, Photocatalytic)

Mechanical Properties of Synthesized Slag-Based Geopolymer Concrete

By: Khaled Moustafa Hussien Shibl – M. Sc. – 2022

Supervisor(s): Dr.Osama Hodhod

(Slag, Silica fume, Fly ash, Geopolymer concrete, Mechanical properties)

The Production of High Strength Geopolymer Concrete (Green Concrete)

By:Sara Yousef Hassan Abo Hattab–M. Sc. – 2022

Supervisor(s): Dr.Osama Hodhod

(Geopolymer concrete, Destructive test, Non-destructive Test, Ground granulated blast furnace slag, Fly Ash)

Numerical Study of RC Deep Beams Enhanced By Different Techniques

By: Mohammed Wagdi Ismail Eisa – M. Sc. – 2022

Supervisor(s): Dr.Osama Hodhod

(Deep beams, Reinforced concrete, Finite element method, CFRP, Strut-and-tie model)

Flexural Behavior of High Strength Reinforced Concrete Beams Strengthened By Carbon Fiber Reinforced Polymer or Steel Plates

By: Ahmed Mohammed Hany Mahmoud Kadry – M. Sc. – 2022

***Supervisor(s):* Dr.Hany Abdallah, Dr. Khaled El-Kashif**

(Flexural strengthening, Preloaded HSRC beams, Steel plates, CFRP sheets)

Experimental Study on Flexural Behavior of Preloaded RC Beams Strengthened By NSM-FRP Bars

By: Mostafa Mohammed Saied Said – M. Sc. – 2022

***Supervisor(s):* Dr. Mohamed Eisa , Dr. Khaled El-Kashif**

(Flexural strengthening, Preloaded RC beams, BFRP bars, GFRP bars, NSM)

Boundary Element Formulations for Structural Dynmaics

By: Elsayed Mohammed Elsayed Elsheikh – Ph.D. – 2022

***Supervisor(s):* Dr.Youssef Rashed**

(Boundary element, Finite element, Dynamics, Elasticity, Plate bending)

2021

Repair of Prestressed Concrete Beams Using CFRP Strips

By: Heba Shehata Sayed Ahmed – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdalla, Dr. Khaled El-Kashif

(Bridges, Beams, Losses, Repair, CFRP, External bonded, Prestressed, Post tensioned)

Behavior of Composite Concrete Columns with Exterior Steel Angles and Batten Plates Using Different Types of Concrete

By: Dina Slah El Din Mohamed Abd El Aziz – M. Sc. – 2021

Supervisor(s): Dr. Sherif Murad, Dr. Hossam Hodhod

(Composite column, Steel fiber concrete, Lightweight concrete, Reinforced concrete, Finite element modeling)

Experimental and Numerical Investigation on Torsion strength of Steel Hollow Square Sections strengthened with CFRP Wraps

By: Ihab Ramadan Mostafa Mohamed – Ph.D. – 2021

Supervisor(s): Dr. Sherif Safar

(CFRP, De-bonding, SHS, Strengthening, Torsion)

Experimental and Numerical Investigation on Strength of Eccentrically Loaded Steel Square Hollow Sections

By: Bassem Moamed Dawod Ibrahim – Ph.D. – 2021

Supervisor(s): Dr. Sherif Safar

(Non-linear analysis, Eccentric loading, Local buckling, Steel square hollow section (SHS), Yielding failure)

3D-Modeling of Long-Span Cable-Stayed Bridges and Fluid-Structure Interaction Domains

By: Mohamed Osama Ibrahim EL Gohary – Ph.D. – 2021

Supervisor(s): Dr. Walid Atiya

(Air, Bridges, Stayed, Domain, Modeling)

Laboratory Testing and Numerical Modeling of Frame Corner Connections Fabricated From Steel Cold-Formed Sections

By: Ahmed Mohamed Massoud – M. Sc. – 2021

Supervisor(s): Dr. Sherif Murad, Dr. Hazem Elanwar, Dr. Maged Hanna

(Cold-formed sections, Corner connection, Experimental testing, Finite element modeling, Self-drilling screw connection)

Assessment of Cyclic Behavior of Frame Corner Connections Fabricated From Steel Cold-Formed Sections

By: Yasser Nasr Ibrahim Mostafa – M. Sc. – 2021

Supervisor(s): Dr. Sherif Murad, Dr. Hazem Elanwar, Dr. Maged Hanna

(Cold-formed sections, Corner connection, Cyclic loading, Finite element modeling, Self-drilling screws)

Laboratory Testing and Numerical Modeling of Frame Apex Connections Fabricated From Steel Cold-Formed Sections

By: Mohamed Hosny Zaki Abdelrahman – M. Sc. – 2021

Supervisor(s): Dr. Sherif A. Murad, Dr. Hazem Elanwar, Dr. Maged Hanna

(Cold-formed sections, Apex connections, Experimental testing, Finite element modeling, Self-drilling screw connection)

Effect of Sea Water as a Mixing Water and Curing Water on Mechanical Properties of Geo-Polymer Mortar and Concrete of Furnace Slag

By: Adel Abd Elfatah Abd Elfatah – M. Sc. – 2021

Supervisor(s): Dr. Ahmed Ragab, Dr. Mohamed Ismail
(Tap water, Seawater, Fly-ash, Geo-Polymer composite, Slag)

Effect of Using Bio-Cement on the Serviceability Limits of Reinforced Concrete Beams

By: Mohamed Mohsen Mohamed Omran – M. Sc. – 2021

Supervisor(s): Dr. Akram Torkey, Dr. Khaled El-Kashif
(Bio-cement, Bio-concrete, Serviceability limits, Self-healing, Deflection of beams)

Experimental and Analytical Study on Shear Bond Behavior of Composite Deck Slab with Shear Connectors

By: Kareem Mohamed Mohamed Abd Elkareem – M. Sc. – 2021

Supervisor(s): Dr. Murad Bakhom, Dr. Hanan Eltobgy
(Composite deck slab, Shear connectors, Profiled steel, Shear bond behavior, M and K method)

Shear Behavior of Concrete Wide Beams Reinforced By Spirals Stirrups

By: Yasser Yehia Farag Mahmoud – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdalla, Dr. Ahmed Elansary
(Shear resistance, Reinforced concrete, Wide beams, Spiral, Stirrups)

Numerical Modeling of Apex Connections in Cold-Formed Steel Gable Frames

By: Arwa Mohamed Naguib Ahmed Ali – M. Sc. – 2021

Supervisor(s): Dr. Sherif Murad, Dr. Hazem Elanwar
(Cold-formed steel, Finite element modeling, Apex connection, Ultimate capacity, Failure modes)

Seismic Response Modification Factor (R) For Steel Concrete Mixed Structures

By: Ayman Mohamed Abd Elrady Abd Elmotagaly – M. Sc. – 2021

Supervisor(s): Dr. Walid Atiya
(Response modification factor (R), Steel-concrete mixed structures, Non-linear static pushover analysis, SAP 2000)

Utilization of Spent Foundry Sand, Cement Kiln Dust and Steel Slag as Total Replacement of Aggregate in Concrete

By: Mohamed Ahmed Sabry Ismail – M. Sc. – 2021

Supervisor(s): Dr. Osama Hodhod, Dr. Mohamed Ismail
(Spent foundry sand, Cement kiln dust, Blast furnace slag, By-product aggregates, Compressive strength)

Analyzing Engineering-Related Delays of Construction Projects in Yemen Using Quality Function Deployment

By: Salah Aldeen Abdo Mahdi salah – Ph.D. – 2021

Supervisor(s): Dr. Mahdy Marzouk
(Construction delays, Delays and claims causes, Quality function deployment (QFD), Yemen)

Analysis of Truck Collision on Reinforced Concrete Columns Using Applied Element Method

By: Ahmed Hamdy Mohamed Zawam – M. Sc. – 2021

Supervisor(s): Dr. Hamed Hadhoud

(Equivalent truck frame, Applied element method, ELS)

Impact Resistance of Geopolymer Concrete Based on GGBS

By: Moussa Mohame Moussa Nafei – M. Sc. – 2021

Supervisor(s): Dr. Ahmed Ragab, Dr. Ismail Serag

(Geopolymer concrete (GPC), Impact resistance, Ground granulated blast furnace slag (GGBS), Silica fume (SF), Fiber reinforced concrete)

Production of Lightweight Bricks from Palm Fronds Fibers and Cement Kiln Dust with Cement Binder or Metakaolin Based Geopolymer Composite

By: Yasser Talaat Osman Mohamed – M. Sc. – 2021

Supervisor(s): Dr. Ahmed Ragab, Dr. Ismail Serag

(Palm fibers, Cement dust, Geopolymer composite, Metakaolin)

Life Cycle Carbon Emissions Assessment for Buildings in Egypt

By: Amal Khaled Nasr – M. Sc. – 2021

Supervisor(s): Dr. Moheeb El Said, Dr. Mona Abou-Hamd

(Life cycle assessment , Life cycle energy analysis , Life cycle carbon emissions analysis , Buildings construction, Building materials)

Novel Technique for Producing Lightweight Blocks from Thermally Treated Cement Kiln Dust and Geopolymer Compounds

By: Reham Abdel Mohsen Mohamed – M. Sc. – 2021

Supervisor(s): Dr. Ahmed Ragab , Dr. Ismail Serag, Dr. Mohamed El-Feky

(Cement kiln dust; Thermal treatment; Metakaolin; Fly-Ash; Lightweight blocks; Geopolymer composites)

Investigating the Performance of Nano Silica & Carbon Nano Tubes Concrete Subjected to Elevated Temperature

By: Ahmed Saied Ahmed Abd El-Haleem – M. Sc. – 2021

Supervisor(s): Dr. Mohsen El-Attar, Dr Ahmed Ragab, Dr . Mohamed El-Feky

(Nano silica; Carbon nano tubes; Fire resistance; Elevated temperature; Thermal effect.)

Study the Effect of the Complete Replacement of Ordinary Portland Cement with Steel Slag-Based Geopolymer on the Properties of Concrete to Operating Load Conditions

By: Ali Kareem Farhan– M. Sc. – 2021

Supervisor(s): Dr. Osama Hodhod, Dr . Ismail Serag

(Abrasion, Geopolymer, Steel slag, OPC, Coarse aggregate)

Cost Analysis of Post-Tensioned Slabs in Multi-Storey Buildings Considering Seismic Effect

By: Osama Khalid Abdelaziz Hamouda – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdalla

(Multi-storey, Post tensioned slab, Comparative analysis, Cost, Seismic)

Torsional Behavior of Reinforced Concrete Box Section Beams

By: Mahmoud Yasser Mahmoud Khalaf – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdalla

(RC beams, Box section, Torsion, Twisting angle, Normal strength concrete)

Seismic Analysis of High-Rise Buildings with Floating Columns

By: Ahmed Mohamed Saeed Mohamed Azab – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdalla

(Floating columns, High-rise buildings, seismic analysis, ETABS)

A Proposed Technique to Estimate an Adequate Seismic Gap in Mid-Rise Buildings

By: Abdallah Magdy Shawky Muhammad – M. Sc. – 2021

Supervisor(s): Dr. Adel Akl , Dr .Mostafa ElSayed

(Adjacent buildings, Impact elements, Time history analysis, Seismic Joint; Seismic pounding)

Optimum Outrigger Locations in High-Rise Steel Buildings Using Artificial Neural Networks

By: Mohamed Ali habshi – M. Sc. – 2021

Supervisor(s): Dr. Sherif Murad, Dr. Hazem Al-Anwar

(Outrigger system, High rise, Steel buildings, Lateral loads, Neural networks)

Integrated Point Cloud and Artificial Intelligence Approach for Facility Management

By: Mohamed Magdeldin Mahmoud Adel Zaher – Ph.D. – 2021

Supervisor(s): Dr. Mahdy Marzouk

(Artificial intelligence, Deep learning, Facility management, Neural networks, 3D Laser scanning)

Seismic Effects On Deep Tunnels Including Soil Interface Friction

By: Amr Ibrahim Abdelaziz Mohamed – Ph.D. – 2021

Supervisor(s): Dr. Adel Akl, Dr. Osman Ramadan

(Circular tunnels; Slippage condition; S-Waves; P-Waves; Soil-Tunnel interface)

Assessment of Seismic Behavior for Eccentric Braced Frame with Vertical Link

By: Nada Nasser Mohamed Sobhy – M. Sc. – 2021

Supervisor(s): Dr. Sherif Murad, Dr. Kamal Ghamry

(Non-linear analysis, Pushover analysis, Time history analysis, Length of link, Response modification factor)

Improving Traditional Planning With Partial Implementation of Last Planner System In Egypt

By: Mahmoud Abdel Moneim Mohamed Mohamed – M. Sc. – 2021

Supervisor(s): Dr. Moheeb El-Said, Dr. Mona Abou Hamd

(Last, Planner, System, Partial, Implementation)

Seismic Performance of Cable-Stayed Bridges with Different Geometric Conditions

By: Ahmed Mohamed Fawzy Ghanem – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdallah, Dr. Khaled El-Kashif

(Cable-stayed bridges, Pylon shape, Deck-tower interaction, Effect of changing deck width, Seismic demand in the pylons)

Experimental Study on punching Shear Behavior of RC Flat Slabs According to the Egyptian Code

By: Mahmoud Mohamed Mohamed – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdallah, Dr. Rasha Senousi

(Punching, flat slabs, flexural reinforcement, shear reinforcement, crack pattern)

Analysis of Low Strength RC Beams Strengthened with FRP Sheets

By: Abdul Rahman Mamoun Ali – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdallah, Dr. Ahmed Youssef

(Shear behavior, Flexural behavior, Low strength concrete, CFRP sheets, Finite element method By Ansys)

Behavior of Low Strength RC Beams Strengthened with FRP Sheets

By: Wisam Elhammali Mansour – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdallah, Dr. Ahmed Youssef

(Shear behavior, Flexural behavior, Low strength concrete, CFRP sheets, RC)

Numerical Modeling and System Identification of a Historic Masonry Structure in Historic Cairo Using Dynamic Investigation Tests

By: Ahmad Reda Abd-Elslam – M. Sc. – 2021

Supervisor(s): Dr. Shrief Murad, Dr. Adel El-Attar

(Dynamic identification, Numerical modeling, System identification, Model updating, Neural networks)

Shear Behavior of Recycled Aggregates R.C Beams with Openings

By: Mohamed Khamis Metwally Mesrega – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdallah, Dr. Ghada Diaa

(Beam, Normal, Recycled, Coarse, Opening)

Numerical Assessment of Multistory Reinforced Concrete Structures with Soft Story

By: Ibrahim Ragab Attiya Ali Sallam – Ph.D. – 2021

Supervisor(s): Dr. Hamed Hadhoud

(Soft story, Collapse, Earthquake, Strengthening, AEM)

Influence of Infill Walls on Reduction of the Seismic Gap

By: Ahmed Mohamed Abdel Hamid Omar – M. Sc. – 2021

Supervisor(s): Dr. Sherif Murad, Dr. Mostafa ElSayed

(Infill walls, Separation distance, RC frames, Pushover analysis, Damage state)

Investigating Design Codes Criteria for Post Tensioned Concrete Slabs

By: Ahmed Magdy Abd ElMoneim Baraka – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdallah

(Finite element analysis - Deflection – Stresses –Cost analysis – Programming)

Vulnerability Based Infrastructure Fund Allocation Optimization Model

By: Mohamed Ahmed Bahaa EL-Din Ahmed – M. Sc. – 2021

Supervisor(s): Dr. Hesham Osman, Dr. Dina Saad

(Optimization; Funding decisions; Vulnerability; Deterioration modeling; Infrastructure rehabilitation)

Effect of Pile Shaft Free Length and Column-To-Piles Stiffness on the Extent and Hierarchy of Inelastic Excursions in Bridge Substructure System Due To Seismic Loading

By: Hazem wasfy Sadek Tawadros – M. Sc. – 2021
Supervisor(s): Dr. Sameh Mehanny, Dr. Mousa Nagiub
(Bridges, Seismic response, Ductile behavior, Piles, EC8)

Prioritization of Funding For Historic Structures Rehabilitation

By: Amr Ahmed Omar – M. Sc. – 2021
Supervisor(s): Dr. Sherif Murad, Dr. Atef Saad
(Economic benefits, Willingness to pay, Multi-objective optimization, Behavioral economics, Heritage conservation summary)

Digitizing Material Passport for Sustainable Construction Projects Using BIM

By: Islam Atta Abdullah Othman – M. Sc. – 2021
Supervisor(s): Dr. Mahdy Marzouk, Dr. Emad Bakhoum
(Material passport; Construction and demolition waste management; Sustainability assessment, BIM, Modular construction)

Punching of Reinforced Concrete Slab-Column Connections Subjected to Combined Axial Loads and Unbalanced Moments

By: Ahmed Gamal Mohamed Abd El-gawad – M. Sc. – 2021
Supervisor(s): Dr. Hatem Mostafa, Dr. Kamal Metwally
(Punching, Slab-column connections, Axial loads, Unbalanced moments, ANSYS)

Analysis of RC Beams with Openings Strengthened with CFRP

By: Yasser Mohamed Magdy Hassan Morsy – M. Sc. – 2021
Supervisor(s): Dr. Hany Abdalla
(RC beams, web opening, CFRP sheets, Strengthening, Finite element)

Selecting Standard Form of Construction Contracts using Text Analysis and Multi Criteria Decision-Making Techniques

By: Yasmine Mokhtar Hassan Elkhayat – M. Sc. – 2021
Supervisor(s): Dr. Mahdy Marzouk
(Standard form of construction contracts, Text analysis, Multi-criteria decision-making, AHP, TOPSIS)

Design Procedure of Stay Cables for Different Bridge Configurations

By: Mostafa Elsayed Elrefaay Sorrow – M. Sc. – 2021
Supervisor(s): Dr. Sherif Murad, Dr. Hazem El-Anwar
(Cable-stayed bridge, CSI finite element, Cables arrangements, Post-tensioning cable forces, Optimization)

Strengthening of Circular Hollow Sections (CHS) X-Joints

By: Peter Gerges Melek – M. Sc. – 2021
Supervisor(s): Dr. Ashraf Osman, Dr. Sameh Gaawan
(Strengthening, Circular, Hollow sections, X-joints, parametric)

Numerical Study on the Behavior of CFRP-Strengthened Cold-Formed Steel Beams Considering the Effect of Cohesive Material

By: Ahmed Fathy Ibraheem – M. Sc. – 2021
Supervisor(s): Dr. Hassanien Serror, Dr. Hazem Elanwar
(Cold-formed steel, Moment resisting frame, Monotonic behavior, Carbon fiber reinforced polymer, Strengthened cold formed steel beams)

Risk-Based Assessment of The Response Modification Factor for Adequate Ductility RC Frames

By:Ehab Emad Fawzy Ayad – M. Sc. – 2021

Supervisor(s): Dr. Walid Atiya

(R-factor, collapse; fragility, spectral shape, Open sees)

An Expert System for Enhanced Accuracy of Cost Estimating In EPC/Turn -Key Projects

By:Mahmoud Mohamed Sami Metwalli– M. Sc. – 2021

Supervisor(s): Dr. Nabil Abdelbadie, Dr. Atef Abdelmoghny

(EPC, Cost, Estimate, Contingency, Fuzzy)

Study the effect of New Additives on Compressive Strength and Shear strength of Concrete

By:Amira Maawd Ali Eid – M. Sc. – 2021

Supervisor(s): Dr. Mohsen El attar, Dr. Osama Hodhod

(Shear strength, Compressive strength, Nano silica, Glass fiber, Carbon fiber)

Effect of Sand Properties on Fresh and Hardened Concrete Properties

By:Ahmed Helmy Mohamed – M. Sc. – 2021

Supervisor(s): Dr. Ahmed Ragab, Dr. Mohsen El Attar, Dr. Dina Sadek

(Fineness modulus, % of Fine materials, Sand equivalent, Methylene blue value)

Use of Steel Fibers to Enhance Mechanical Properties of Concrete Subjected to High Temperatures

By:Hossam El-Din Saleh Abd El-Hameed – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdalla

(Steel fiber reinforced concrete, Flexure ultimate load, Splitting ultimate load, Compressive ultimate load)

Study Effect of FEM Modelling Techniques & Parameters on Non-Linear Dynamic Analysis of Mid-Span Concrete Bridges

By:Boules Nabil Wadie Morkos– M. Sc. – 2021

Supervisor(s): Dr. Murad Bakhoun,Dr.Mousa Farag

(Non-linear analysis of bridges, assumptions, Opensees, Performance-based analysis, Fragility assessment)

Wind Induced Response of Outrigger Braced Structures

By: Ahmed Mohamed Yasin Abdel Ghany – M. Sc. – 2021

Supervisor(s): Dr. Sherif Mourad, Dr. Mostafa El Sayed

(Wind, Human comfort, Outrigger, High-rise, Dynamic analysis)

Levels of Damage in Steel Moment Resisting Frames with Expansion Joints Due to Seismic Pounding

By: Abubakr Rabie Ahmed Abubakr – M. Sc. – 2021

Supervisor(s): Dr. Ashraf Osman

(Seismic pounding, Seismic expansion joint, Non-linear analysis, Adjacent buildings)

Calibration to the Seismic Provisions for Steel Moment Resisting Frames in the New Proposed Egyptian Code for Steel Structures

By: Hossam Hamdy Ahmed Mohamed – M. Sc. – 2021

Supervisor(s): Dr. Ashraf Osman

(Code calibration, Response modification factor, Conventional pushover analysis, Time history analysis, Steel moment resisting frames)

BIM Automated Rft Details Tool for BEM Based Design

By: Ahmed Hegazy Saleh – M. Sc. – 2021

Supervisor(s): Dr. Yousef Rashed

(BIM, Boundary element method, RFT, Revit, Reinforcement)

Behavior of Shallow Wide RC Beams Under Eccentric Loading

By: Samer Magdy Mahmoud – M. Sc. – 2021

Supervisor(s): Dr. Magdy Kassem, Dr. Rasha El Senosy

(Shallow wide beam, Cracks pattern; Eccentric load, Ultimate load, Cracks bundle)

Reliability Assessment of Stirrups in Resisting Punching Shear in R.C. Flat Slabs

By: Ahmed Raafat Ghanem – M. Sc. – 2021

Supervisor(s): Dr. Hany Abdallah, Dr. Hala Metawie

(Punching shear reinforcement, stirrups, yield strength, slab thickness, multiple leg stirrups)

Analytic Hierarchy Process for the Selection of the Optimum Spent Fuel Interim Storage Type and Its Optimum Location in Egypt

By: Nesreen Refaat Bayomi Kotb – M. Sc. – 2021

Supervisor(s): Dr. Moheeb El-Said, Dr. Ahmed Saad El-Din

(Analytic hierarchy process, At-reactor interim storage, Centralized interim storage, Nuclear power plant, Nuclear waste)

Predicting Indoor Air quality in Buildings Using Internet of Things and Deep Learning

By: Mohamed Atef Badreldin Aly – M. Sc. – 2021

Supervisor(s): Dr. Mahdy Marzouk

(Indoor air quality, Internet of things, Artificial intelligence, Buildings environment, Deep learning)

Physical, Mechanical and Durability Properties of Nano Modified Limestone Cement Concrete

By: Albraa Kamal Osman – M. Sc. – 2021

Supervisor(s): Dr. Osama Hodhod

(Limestone, Nano silica, Compressive strength, Permeability, Elevated temperature resistance)

Behavior of Reinforced Concrete Beams Exposed to Heat/ Fire

By: Abeer Abd –El Kader Mohamed Abd El Rhman – M. Sc. – 2021

Supervisor(s): Dr. Mohamed Issa, Dr. Ahmed Abd el Fattah

(Reinforced concrete beams, Heat, Numerical analysis, Exposed to fire, Residual capacity and parametric study)

Comparison between Finite Element and Different Codes for Determining the Capacity of Composite Beam Column

By: Mohammed Ali Ibrahim Ali Mohammed – M. Sc. – 2021

Supervisor(s): Dr. Sherif Mourad

(Composite column, Concrete encased, Interaction diagram, Steel-core area)

Seismic Resilience Quantification of a Hospital Designed According to ECP-201

By: Heidi Yosri Mohammad Hosni – M. Sc. – 2021

Supervisor(s): Dr. Walid Attiya

(Seismic, Resilience, Assessment, FEMA, Pact)

Opportunities and Threats in Using Fidic Red Book Standard Forms Under the Egyptian Law

By: Omar Ahmed Hisham Kandil – M. Sc. – 2021

Supervisor(s): Dr.Nabil Abdelbadie, Dr. Tarek Hussein

(Fidic red book, Egyptian law, Egyptian civil code, Egyptian administrative law, Private and public works contracts)

Performance-Based Plastic Seismic Design of RC Structures Considering Soil-Structure-Interaction

By: Mohamed Kamal-Eldin Mahmoud Hassan Elkazak – Ph.D. – 2021

Supervisor(s): Dr.Adel Akl

(Performance-based plastic design (PBPD), Reinforced concrete special moment frames (RC SMF), Soil-structure interaction (SSI), Pushover analysis, Fragility curve)

Computational and Experimental Study of the Mechanical Behavior of Grouted Sleeve Splice Connections for Precast Concrete Construction Under Axial Tensile Load

By: Abdallah Mostafa Soliman – Ph.D. – 2021

Supervisor(s): Dr. Hossam Hodhod, Dr. Hatem Hassan

(Grouted splice, Bond strength, Confinement stress, Mechanical splices, Precast concrete connections, Bar embedment length)

CFRP Strengthening of Steel-RC Composite Beams – A Parametric Study

By: Mona Mahmoud Abd Elfattah – M. Sc. – 2021

Supervisor(s): Dr. Walid Attiya, Dr. Metwally Abd ELAziz, Dr. Mohamed Mohie Eldien

(Composite I –beam, Strengthening, Non-linear analysis, Fiber, I-beam)

Investigation of Out-of-Plane Bending Behavior of Precast Concrete Sandwich Panels

By: Mohamed Fawzy Abdel Aziz – Ph.D. – 2021

Supervisor(s): Dr. Walid Attiya, Dr. Ahmed Amer

(Concrete, Sandwich panels, Insulated panels, Precast panels, Flexural capacity of precast concrete panels)

Seismic Behavior of Light-Gauge Cold-Formed Steel Stud Walls

By: Mohammed Fathi Abd El-Hamid Belal – Ph.D. – 2021

Supervisor(s): Dr. Sherif Mourad, Dr. Mohammed Sorrou , Dr. Mohammed EL-Saadawy

(Cold-formed steel, Light-gauge stud walls, Finite element modeling, Monotonic loading; Cyclic loading)

2020

Flexural Behavior of Preloaded and Repaired Reinforced Concrete Continuous Beams Using Recycled Concrete

By: Shady Ahmed Amin Aboali – M. Sc. – 2020

Supervisor(s): Dr. Adel El-Attar, Dr. Khaled El-Kashif

(Reinforced concrete, Preloaded continuous beams, Recycled concrete)

The Effect of Non-Uniformity of Dimensions on the Evaluation of Seismic Response Modification Factor for Reinforced Concrete Frames

By: Manar Gamal Abd Elrahman Mahmoud – M. Sc. – 2020

Supervisor(s): Dr. Walid Atiya, Dr. Manar Hussein

(Response modification factor, Pushover, Parametric study, Ductility factor, Non-uniformity in dimension)

Strengthening of RC Flat Slabs with Cutout Openings

By: Eslam Hatem Mahmoud El-Mawsly – M. Sc. – 2020

Supervisor(s): Dr. Hany Abdalla, Dr. Ashraf Shawky, Dr. Khaled El-kashif

(RC slab strengthening, Central cutout, Steel strips, CFRP, ECC)

Mechanical Properties of Lightweight RC Beams Containing Fibers Under the Effect of Elevated Temperature

By: Mustafa El-Nos Abd Alazeem – M. Sc. – 2020

Supervisor(s): Dr. Osama Hodhod

(Lightweight concrete, Expanded polystyrene beads, Glass fiber, Temperature elevated, Flexural)

Evaluation of Lateral Response of Tall Building with New Proposed Outrigger Locations

By: Mahmoud Mohamed Mahmoud Eisa Eisa – M. Sc. – 2020

Supervisor(s): Dr. Adel Akl, Dr. Mostafa ElSayed

(Outrigger system, Proposed outrigger location, Seismic fragility)

BIM Based on BEM with High Performance Computing

By: Ahmed Alaaeldean Mohamed Abdelhaleam Torky – Ph.D. – 2020

Supervisor(s): Dr. Youssef Rashed

(Boundary element method, Coupled BEM-FEM, BIM-tools, High-rise buildings, GPU computing)

Evaluation of Green Roller Compacted Concrete Behavior in Rigid Pavement for Roads

By: Ibrahim Sobhy Khalil Ibrahim – Ph.D. – 2020

Supervisor(s): Dr. Osama Hodhod, Dr. Zienab Salah El Dien

(Rigid Pavement, Roads, Green Concrete, Local Byproduct, Nano Materials Boundary Element Method, Coupled BEM-FEM, BIM-Tools, High-Rise Buildings, GPU Computing)

Enhancing Interoperability in Structural Analysis Modeling Using BIM

By: Kareem Nabil Mosaad Shoieb – Ph.D. – 2020

Supervisor(s): Dr. Mahdy Marzouk, Dr. Mohamed Serror

(Building information modeling (BIM), Industry foundation classes (IFC), Structural analysis domain, Interoperability, Construction industry)

Impact Analysis of Design Changes in Healthcare Construction Projects Using System Dynamics

By: Farouk Gharib Ali Hussien – Ph.D. – 2020

Supervisor(s): Dr. Moheeb El-Said, Dr. Dina Saad

(Change order, Ripple effect, Hospital, Simulation, Medical)

Numerical Study on the Rotation Capacity of Cold-Formed Steel Beams Strengthened with Steel Interconnected Part

By: Hussein Shawki Osman Ati – M. Sc. – 2020

Supervisor(s): Dr. Hassanien Serror

(Cold-formed steel, Numerical analysis, Rotation capacity, Energy dissipation, Steel interconnected part)

Performance of Shear Reinforcement Against Punching Shear Loads

By: Ahmed Mohamed Elsaid Said Issa – Ph.D. – 2020

Supervisor(s): Dr. Talat Mostafa, Dr. Hamed Hodhod, Dr. Hatem Gheith

(Flat plates, Punching shear, Slab-column connection, Shear reinforcement, Vertical closed stirrups)

Staged Construction Analysis of Reinforced Concrete Buildings with Different Lateral Load Resisting Systems

By: Mohamed Ibrahim Metwally Mohamed Ibrahim – Ph.D. – 2020

Supervisor(s): Dr. Adel El-Attar, Dr. Ahmed Elansary

(Tall buildings, Lateral load resisting systems, One step analysis, Staged-construction analysis, Shrinkage and creep)

Seismic Response Evaluation of Multi-Storey Buildings with Soft Floor

By: Mariem Mohamed Abd Al Ghany Ahmed – M. Sc. – 2020

Supervisor(s): Dr. Hany Abdalla, Dr. Khaled El-Kashef

(Flexible storey, Moment resisting frame, Multi-storey building, Stiffness, Shear wall system)

Condition Assessment of Bridge Deck Using Ground Penetration Radar

By: Mohamad Ata Abdel Latif Mohamad Selim – M. Sc. – 2020

Supervisor(s): Dr. Mahdy Marzouk, Dr. Hassanien Serror, Dr. Mona Abou-Hamad

(Bridge deck, Ground penetration radar, Steel corrosion, Clustering techniques, Finite element analysis)

Calibration of Numerical FEM Models and Investigation of Live Load Distribution Factors for Simply Supported Composite Steel I-Girder Bridges According to Eurocode

By: Mohammed Haitham Mohammed Hosney Ahmed Elshafie – M. Sc. – 2020

Supervisor(s): Dr. Mourad Bakhoum

(Composite steel bridges, Traffic actions, Modeling options & criteria, Live load distribution factors, Finite element analysis)

Optimizing Execution of Sanitation Networks Projects in Slum Areas

By: Mahmoud Bahi Abd El-Kareem – M. Sc. – 2020

Supervisor(s): Dr. Mahdy Marzouk, Dr. Omar El-Anwar

(Slum area, Sanitary network upgrading, Network logistic analysis, Serviceability performance measurement, Genetic algorithm)

Repair of RC Beams Subjected to Torsion Using Steel Plates

By: Osama Ahmed Mostafa Ali – M. Sc. – 2020

Supervisor(s): Dr. Hany Abdalla, Dr. Ghada Diao

(RC beams, Steel plates, Torsion, Repair, Twisting angle)

Repair of Reinforced Concrete Beams Subjected to Torsion Using Ferrocement

By: Sarah Mohammed Yousef AL-Zabidi – M. Sc. – 2020

Supervisor(s): Dr. Hany Abdalla, Dr. Ghada Diaa

(Repair, RC beams subjected to torsion, Ferrocement)

Optimizing the Production of Metakaolin Based Geopolymer Concrete Under Ambient Temperature

By: Ahmed Abdelaleim Abdelaleim Elhadidy – M. Sc. – 2020

Supervisor(s): Dr. Mohamed Ismaeil, Dr. Muhammad El-Feky

(Geopolymer, Kaolin, Metakaolin, Ambient temperature, alkali activated)

Strengthening of Steel Beams Lateral Torsional Buckling using FRP

By: Eslam Bahaa El-Dien Mohamed Younes Elalfy – M. Sc. – 2020

Supervisor(s): Dr. Hassanien Serror, Dr. Hazem El-Anwar

(Lateral torsional buckling, Carbon fiber reinforced polymer, Carbon fiber reinforcement sheets strengthening, Carbon fiber reinforcement plates strengthening)

A Study of the Modeling of Rigid and Semi-Rigid End-Plate Steel Connections

By: Elsayed Faisal Salman Elnaday – M. Sc. – 2020

Supervisor(s): Dr. Sherif Mourad, Dr. Nabil Mahmoud

(Steel connections, Extended end-plate, flush end-plate, Rigid connections, Semi-rigid connections)

Analytical Study on Flexural Behavior of Reinforced Concrete Beams Strengthened with FRP

By: Sayed Samir Elsayed Abdallah – M. Sc. – 2020

Supervisor(s): Dr. Hany Abdalla, Dr .Khaled El-Kashif, Dr .Ahmed Anwar

(RC beams – Preloaded beams – FRP – Carbon fiber sheets)

Structural Behavior of Steel Moment Resisting Frames with Limited Ductility Cladded with External Precast Concrete Panels Under The Action of Lateral Loads

By: Mohamed Gamal Eldin Khedr Mohamed – M. Sc. – 2020

Supervisor(s): Dr. Ashraf Osman

(Seismic behavior, Cladded steel frames, Precast reinforced concrete panels, Exterior cladding, Cladding effect)

Behavior of Flat Slabs with Shear Reinforcement In Punching

By: Ahmed Hassan Sayed – M. Sc. – 2020

Supervisor(s): Dr. Mohamed Rabei

(Shear reinforcement, Flat slab, Punching shear, Vertical stirrups, Punching shear capacity)

Seismic Retrofitting Of Gravity Concrete Frames Using Eccentric X-Bracing

By: Ahmed El Sayed Farouk Mahmoud – M. Sc. – 2020

Supervisor(s): Dr. Ashraf Osman

(Seismic retrofitting, Gravity concrete frames, Eccentric X-bracing, Steel eccentric X-bracing; Story shear & drift)

Analysis and Design of Diagonally Stiffened Steel Plate Shear Walls

By: Amr Ali Hassan Farag Elsayed Elbanna – Ph.D. – 2020

Supervisor(s): Dr. Mokhtar Seddeik, Dr. Sherif Safar

(Diagonally stiffened shear wall; Ultimate shear strength; Column stiffness; Diagonal tension; Tension field action)

Behavior of Composite Steel Girder Bridges under Effect of Blast Loads

By: Kamel Tamer Kamel Hawash – Ph.D. – 2020

Supervisor(s): Dr. Walid Attia, Dr. Ahmed Amer, Dr. Sherif Elwan

(Composite steel bridges, Blast loads, Non-linear analysis, Explosive weight, Behavior of bridges)

Using 5D Modeling In Constructability Assessment of Traditional Structures

By: Mohamed Moataz Abdelrheim El-Marashly – M. Sc. – 2020

Supervisor(s): Dr. Hany Abdalla, Dr. Karim El-Dash

(Constructability, Assessment, BIM, SMART, AHP)

Reliability Analysis of Reinforced Concrete Flat Slabs

By: Mohamed Ahmed Abdel-Razek – M. Sc. – 2020

Supervisor(s): Dr. Walid Atiya, Dr. Metwally Abdel-Aziz, Dr. Morcouc Samaan

(Reliability – Reliability index – PNET method – Yield line – Flat slabs)

Investigating the Efficiency of An Innovative Geopolymer Composites As Repairing Material Subjected to High Temperature

By: Ahmed Saleh Abdalla Moaly – M. Sc. – 2020

Supervisor(s): Dr. Mohamed Ismail

(Geopolymer composites, Repair, Efficiency, High temperature)

Multi-Objective Optimization of Lean-based Construction repetitive scheduling

By: Mohamed Mahmoud Masoud Soliman Masoud – M. Sc. – 2020

Supervisor(s): Dr. Hisham Osman, Dr. Dina Saad

(Lean construction, Repetitive scheduling, Multi-objective optimization, Batch-based scheduling, Pull scheduling)

Multi Criteria Decision Support System to Assess Construction Disputes' Negotiation Process In Construction Projects In Egypt

By: Maged Mohamed Azab Swelam – Ph.D. – 2020

Supervisor(s): Dr. Moheeb ElSaid, Dr. Ahmed El-Dokhmasey

(Construction, Dispute, Negotiation, Assessment, Egypt)

Fuzzy Model for Assessing Delays in Egyptian Residential Projects

By: Tarek Ibrahim Metwaly El-Rasas – Ph.D. – 2020

Supervisor(s): Dr. Mahdy Marzouk

(Construction delays, questionnaire survey, relative importance index, analysis of variance (ANOVA), and fuzzy logic)

Framework for Water Distribution Networks Rehabilitation in Egypt

By: Nehal Ahmed Tarek Mohamed Elshaboury – Ph.D. – 2020

Supervisor(s): Dr. Mahdy Marzouk, Dr. Tarek Atiya

(Infrastructure asset management, Condition assessment, Deterioration modeling, Optimization algorithms, Machine learning models)

Planning of Heritage Buildings Rehabilitation Using Digital Documenting and Visualization

By: Mahmoud Samy Mahmoud – Ph.D. – 2020

Supervisor(s): Dr. Mahdy Marzouk

(3D Laser scanning, Photogrammetry, HBIM, Virtual reality, Optimization)

Planning Utility Infrastructure Requirements in Smart Cities Using BIM And GIS

By: Ahmed Akmal Mohamed Othman – Ph.D. – 2020

Supervisor(s): Dr. Mahdy Marzouk

(Smart cities, Building information modeling (BIM), Geographical information systems (GIS), Cellular automata (CA), Urban development)

Derivation of National Expressions for Damping Modification Factor for the Design of Base-Isolated Buildings

By: Mohamed Hesham Mohamed Mohamed Mansour – Ph.D. – 2020

Supervisor(s): Dr. Adel Akl, Dr. Manar Maher

(Damping modification factor, Base-isolation, Egyptian seismic code, Natural and artificial ground motions, Time history analysis)

Damage Detection in Masonry Piers of Hydraulic Structures Using Dynamic Measurements

By: Ahmed Mostafa Ahmed – M. Sc. – 2020

Supervisor(s): Dr. Adel El-Attar, Dr. Ahmed Anwar

(Hydraulic structures, Damage detection, Masonry piers, Dynamic analysis, Damage index)

Effect of Web Openings on the Critical Local Buckling Load of I-Shaped Plate Girders Considering Stiffeners

By: Hedia Ramadan Riead Mahmoud – M. Sc. – 2020

Supervisor(s): Dr. Walid Attiya, Dr. Kamal Ghamry

(Web openings, Buckling load, I-shaped, Plate girders, Stiffeners)

Beneficial Use of Iron and Steel Slag in Green Concrete

By: Mohamed Abd El-Badie Fadl – M. Sc. – 2020

Supervisor(s): Dr. Ahmed Ragab, Dr. Mohamed El-Attar, Dr. Dina Sadek

(Iron and steel slag, Air-Cooled slag, Green concrete, Physico-mechanical properties, Radiation shielding)

Mutual Effect Between Tunnels and Close-in Buildings

By: Ahmed Abd Elaziz Elhadidi Hikal – M. Sc. – 2020

Supervisor(s): Dr. Adel Akl, Dr. Mostafa Elsayed

(Bored tunnels, Construction stage analysis, Finite element analysis, MIDAS, Soil structure interaction)

Behavior of Composite Pre-Flat Slabs in Resisting Punching Shear Forces

By: Wajdi Jaber Baniya Baniya – Ph.D. – 2020

Supervisor(s): Dr. Ahmed Rashed, Dr. Mohamed Rabie, Dr. Wael Salah El-din

(Composite pre-flat Slabs, Shear reinforcement, Epoxy, Monolithic one layer slabs, Punching, Codes, Proposed equations)

Numerical Evaluation of Response Modification Factor for RC Structures Under The Effect of Vertical and Horizontal Ground Motions

By: Abdelrahman Mohammed Hussein Ahmed – M. Sc. – 2020

Supervisor(s): Dr. Hamed Hadhoud

(Vertical ground motion, Response modification factor, Ductility, Over-strength, Redundancy, AEM)

Behavior of Coupled Walls with High Performance Fiber Reinforced Concrete Coupling Beams

By: Mostafa Hassan Fathi Abdel-Hafeez – M. Sc. – 2020

Supervisor(s): Dr. Hamed Hadhoud

(High performance fiber, Coupled walls, Coupling beams, Lateral loads, AEM)

Seismic Response Modification Factor for Reinforced Concrete Frames Based on Non-Linear Pushover Analysis and Its Effect on Seismic GAPS

By: Walaa Mohammed Abd el-Salam el-Hereby – M. Sc. – 2020

Supervisor(s): Dr. Hamed M. Salem

(Behavior of coupled walls, high performance fiber reinforced concrete, Coupling beams)

Flexural Behavior of Geopolymer reinforced Concrete Beams

By: Mahmoud Ibrahim Ibrahim Nafee Behery – M. Sc. – 2020

Supervisor(s): Dr. Ahmed Ragab, Dr. Mohamed Khafaga, Dr. Mohamed El-Attar

(Geopolymer concrete, Flexural behavior)

Structural Evaluation For Models of Non-Engineered Residential Buildings in Egypt Subject to Vertical and Earthquake Loads

By: Khaled Mohammed Ibrahim Mohammed – M. Sc. – 2020

Supervisor(s): Dr. Adel Akl, Dr. Osman Ramadan, Dr. Mohammed S. Ahmed

(Non-Engineered buildings - Linear dynamic analysis –Deficiencies)

Numerical Simulation of Vessel Collision with Cable-Stayed Bridge Considering Different Tower Shapes

By: Hatam Kamal Mohamad Abdel Gawad – Ph.D. – 2020

Supervisor(s): Dr. walid Attia

(Cable-stayed bridge, Vessel collision, Bridge tower, Numerical simulation)

A Web-Based Application to Measure the Integrated Project Delivery and Associated Risk Reduction in Construction Projects in Egypt

By: Mohamed Elsayed Mohamed Moustafa Younis – Ph.D . – 2020

Supervisor(s): Dr. Moheeb ElSaid, Dr. Ahmed El-Dokhmasey

(Integrated project delivery, Risk, Reduction)

Pushover Analysis of RC Building Frames with Symmetrical Setback

By: Ahmed Gamal Fouad Ali – M. Sc. – 2020

Supervisor(s): Dr. Bahaa ElDin Hanafy, Dr. Nayer El-Esnawy

(Pushover analysis, Symmetrical setback, RC frames, Seismic capacity)

Optimization of Styrofoam Light Weight Concrete Mix Design Using Orthogonal Arrays and Neural Networks

By: Amr Hamdy Mohamed Shawat – M. Sc. – 2020

Supervisor(s): Dr. Osama Hodhod, Dr. Hatem Hassan

(Neural networks, Orthogonal arrays, Styrofoam concrete, Mix design, Machine learning)

Effect of Shear Connectors Distribution and Concrete Compressive Strength on the Shear Transfer of One-way Composite Pre-slabs

By: Mahmoud Mostafa Mohamed El-Hawary – Ph.D. – 2020

Supervisor(s): Dr. Mohamed Rabie, Dr. Wael Salah El-Din

(Shear transfer, Shear connectors, Pre-slabs, Interface roughness)

Studying Optimization of Nonlinear FE Modeling Parameters For RC Beams With Case Study Application of Ledged RC L-Shaped Beams

By: Samuel Hanna Kamel Yaakop – M. Sc. – 2020

***Supervisor(s):* Dr. Mourad Bakhoun, Dr. Hatem Hassan**

(Nonlinear analysis, Optimization, Mesh size, Verification, Ledge beam)

Technology of Recycling of Marble and Granite Powder in Production of Bricks and Interlock

By: Aya Ashraf Zakria Attia – M. Sc. – 2020

***Supervisor(s):* Dr. Mohamed Ismail**

(Marble powder, Interlock, Compressive strength, Abrasion resistance)

Wind Load Analysis of Two Steel Buildings Connected with a Sky-Bridge

By: Abdullah Mohamed Fathi Abdel Razeq – M. Sc. – 2020

***Supervisor(s):* Dr. Adel Akl, Dr. Osman Ramadan, Dr. Ahmed Yousef**

(Tall buildings, Sky-bridges, Wind load, Boundary conditions Beam)

Progressive Collapse of Moment Resisting Steel Frames

By: Mahmoud Samy Ebrahim Mohamed – M. Sc. – 2020

***Supervisor(s):* Dr. Sherif Murad, Dr. Kamal Ghamry**

(Progressive collapse of steel buildings, General service administration (GSA), linear static and nonlinear dynamic analysis, Alternate load path, Prevention of progressive collapse)

2019

Effect of The Number of Floors on Progressive Collapse of Multi-Story Precast Concrete Structures

By: Mohamed Adel Korany Hassan – M. Sc. – 2019

Supervisor(s): Dr. Hamed Hadhoud, Mariam Ehab

(Applied element method, The Effect of number of floors, Precast concrete connections, Progressive collapse analysis, Ordinary moment frames)

Experimental Investigation for the Effect of Steel Fibers on The Mechanical Properties of Recycled Concrete Beams

By: Abdelrahman Emad Hamdy – M. Sc. – 2019

Supervisor(s): Dr. Hany Abdallah, Dr. Mohamed Naguib

(Sustainable construction, Steel fibers, Recycled concrete, Mechanical properties, Flexural strength)

Towards a Simplified and Economic Approach of Blast-Resistant Design of Façade Columns with Limited Standoff Distance

By: Fatma Attia Bakr Attia – Ph.D. – 2019

Supervisor(s): Dr. Hamed Hadhoud

(Blast loading, Column design, Unified Facilities Criteria UFC 3-340-02, Dynamic increase factors DIF, Progressive collapse)

Repair of R.C. Beams with Openings Subjected to Torsion Using Steel Plates

By: Ahmed Rashad Rashad Shalaby – M. Sc. – 2019

Supervisor(s): Dr. Hany Abdalla, Dr. Ghada Diaa

(RC Beams, Repairing, Opening, Steel plates, Torque)

Assessment of Nonlinear Static Procedure for Alternate Path Method for Designing Reinforced Concrete Structures Against Progressive Collapse

By: Mohamed Ayman Mohamed Aly Maidan – M. Sc. – 2019

Supervisor(s): Dr. Hamed Hadhoud

(Progressive collapse, Catenary action, UFC, AEM, APM)

Effect of Recycled Coarse Aggregate on Physical and Mechanical Properties of Concrete

By: Mostafa Magdy Soliman Ashmawy – M. Sc. – 2019

Supervisor(s): Dr. Hany Abdalla, Dr. Ahmed Elansary

(Recycled aggregate, Mechanical properties, Physical properties, Columns, Axial loading)

An Experimental and Analytical Study on the Shear Behavior of Reinforced Concrete Wide Beams

By: Mohammed Abd El-Hamid Zidan Teleb Zidan – M. Sc. – 2019

Supervisor(s): Dr. Magdy Kassem, Dr. Ahmed Abd-El Fattah

(Beams, Reinforced concrete, Shear, FRP, Stirrups)

Shear Behavior of Shallow Beams Cast Using High Strength Self-Compacted Concrete (HSSCC)

By: Mahmoud Ahmed Elazab Abdel Haleem – PHD – 2019

Supervisor(s): Dr. Adel El-Attar, Dr. Tarek Hassan

(Shear strength, Self-compacting, Shallow beams, High strength, Dowel action)

The Linear and Nonlinear Behavior of Mid- Rise Combined Concrete Buildings Under The Influence of Lateral Loads

By: Mohammed Ishaq Shah – M. Sc. – 2019

Supervisor(S): Dr. Hany Abdallah, Dr. Khaled El-Kashif

(Mid-Rise building behavior, Time period, Maximum displacement, Linear and nonlinear)

Non-Linear Behavior of RC Frames With Masonry Infill Walls Subjected to Seismic Loads

By: Mahmoud Hossam Mahmoud Abdallah – M. Sc. – 2019

Supervisor(S): Dr. Walid Atiya, Dr .Mostafa Elsayed

(Fragility curves, Infill walls, Pushover analysis, RC frames)

Behavior of Short H.S.C Composite Steel Columns Repaired By CFRP And Subjected to Uni-Axial And Biaxial Eccentric Loading

By: Karim Salah Al-Adawy – M. Sc. – 2019

Supervisor(S): Dr. Magdy Kassem, Dr .Nasser Elshafey

(H.S.C , Composite columns , Repaired , CFRP , Eccentric loading)

Torsion Behavior Of Steel Fiber Reinforced Concrete Beams with Openings

By: Omar Maghraby Abd El-Mageed – M. Sc. – 2019

Supervisor(S): Dr. Hany Abdallah, Dr .Ghada Diaa

(RC beams, Steel fiber, Torsion, Twisting angle)

Seismic Fragility of Continuous Bridges Considering Wave Passage and Soil-Structure Interaction Effects

By: Amin Abdel-Menem Kotb Abdel-Motaleb – M. Sc. – 2019

Supervisor(S): Dr. Sameh Fahmy, Dr .Osman Ramadan

(Analysis, Seismic fragility, Continuous bridges)

Shear Behavior of Reinforced Concrete Wide Beams Made of Recycled Aggregates

By: Marwan Saad Alazzawi – M. Sc. – 2019

Supervisor(S): Dr. Hany Abdallah, Dr .Rasha Snousy

(Wide-Shallow beams, Beams made of recycled aggregates, Longitudinal reinforcement, Stirrups reinforcement, Width To depth ratio)

Behavior of Post-Tensioned Slabs with Openings

By: Ahmed Fakhr Mohamed Mohamed Ghozy – M. Sc. – 2019

Supervisor(S): Dr. Hany Abdallah

(Post-tensioned, Slabs, Openings, RAM CONCEPT V6.0, ANSYS V19.0)

Mechanical Properties and Durability of Synthesized Geopolymer Composites Based on Metakaolin and Other By-Product Materials

By: Islam Ahmad Ahmad Mahmud El-Gabry – M. Sc. – 2019

Supervisor(S): Dr. Mohamed Ismail

(Cement kiln dust, Slag, Metakaolin, Geopolymer concrete, Compressive strength)

Mechanical Properties and Durability of Synthesized Geopolymer Composites Based on Metakaolin, Silica Fume And Slag

By: Ahmad Bahig Abd El-Hamid Mohamed Ahmad – M. Sc. – 2019

Supervisor(S): Dr. Mohamed Ismail

(Cement kiln dust, Slag, Metakaolin, Geopolymer concrete, Compressive strength)

Experimental Investigation of Fire Effect on Punching Shear Resistance of Slabs Strengthened with CFRP Fan

By: Reda Khaled Abu Elfottouh Ali – M. Sc. – 2019
Supervisor(S): Dr. Hamed Hadhoud, Dr. Hatem Gheith
(Flat slab, Punching shear, Strengthening technique, CFRP)

Optimizing Labors Productivity In Egypt Using Regression And ANN Prediction Models

By: Amr Farouk Azmy Meselhy Hegazy – M. Sc. – 2019
Supervisor(S): Dr. Hesham Osman, Dr. Mona Abou hamd
(Productivity, ANN, Regression, Construction, Optimization)

Performance of Reinforced Concrete Slabs with Lap Splices

By: Dina Noaman Noaman Mohamed – M. Sc. – 2019
Supervisor(S): Dr. Mostafa El-Kafrawy, Dr. Said Taher
(Reinforced concrete, Lap splice, Slabs, Ductility, Ultimate strength)

Assessing The Durability of Concrete Made of Limestone Portland Cement with Additives (Silica Fume – Metakaolin)

By: Mohamed Ahmed Mohamed Ibrahim – M. Sc. – 2019
Supervisor(S): Dr. Osama Hodhod
(Limestone cement, Silica fume, Metakaolin, Accelerated corrosion, Permeability)

Effect of Reinforcement on Punching Shear Behavior of Flat Slabs

By: Sulaiman Nayef Ahmed Al-Gumaily – Ph.D. – 2019
Supervisor(S): Dr. Mohamed Rabei, Dr. Wael Salah Aldeen
(Flat slabs, Punching, Shear reinforcement, Ductility, Energy absorption index, Codes, Proposed equation)

Flexural Behaviour of Continuous Reinforced Concrete Beams Strengthened with Externally Bonded Fiber Reinforced Polymers

By: Maysoun Magdy Mohammed Ismaiel – Ph.D. – 2019
Supervisor(S): Dr. Mohammed Rabei
(CFRP, Continuous R.C. beams, Strengthening, ANSYS, GEP)

Evaluation of Seismic Provisions Pertaining Minimum Required Separation Distance Between Adjacent Mid-Rise RC Buildings

By: Mohamed Asaad Mohamed Awad – M. Sc. – 2019
Supervisor(s): Dr. Ahmed Amer, Dr. Walid Atiya, Dr. Mostafa El-Sayed
(Seismic pounding, Separation distance, adjacent buildings, Seismic analysis, Fragility)

Forecasting the Performance of Last Planner System Implementation Using System Dynamics

By: Abi Hatem Mostafa Mohamed Ahmed – M. Sc. – 2019
Supervisor(s): Dr. Hesham Osman, Dr. Abdel Latif Bakry
(Last planner system, System dynamics, Personality traits, Critical success factors, Performance)

Investigating Seismic Response of Skew Bridges for Various Permutations of Geometric Design Parameters and Abutment Bearings Articulations

By: Mina Fayez Fakhry Soliman – M. Sc. – 2019
Supervisor(s): Dr. Sameh Samir, Dr. Mostafa El-Sayed
(Skew bridges, Seismic effects, Finite element, Design response spectrum)

Finite Element Modeling of R.C Shear Walls Strengthened with CFRP Subjected to Cyclic Loading

By: Amr Hany Ahmed Abdalla – M. Sc. – 2019

Supervisor(s): Dr. Akram Torkey, Dr. Khalid El-Kashif

(CFRP - Finite element – Lateral loads – R.C shear walls – Strengthening)

Investigation of Aerodynamic Stability of Multi-Span Suspension Bridges Considering The Variation of Towers Height

By: Ibrahim Hesham Mahmoud Elsayed – M. Sc. – 2019

Supervisor(s): Dr. Walid Atiya, Dr. Ezz-Eldin Kamel

(Aerodynamic stability, Flutter stability, Critical flutter wind speed, Multi-span suspension bridges, Sag to span ratio)

Punching Shear Analysis of Bonded Post-Tensioned Flat Slabs

By: Ahmed Mahmoud Ahmed El-Refai – M. Sc. – 2019

Supervisor(s): Dr. Hany Abdalla

(Punching failure, Post-Tensioned slab, Slab-column Connection, Flat slab, shear reinforcement)

Seismic Performance of Mid-Rise RC Shear Wall Buildings Under Different Retrofit Techniques

By: Mai Sayed Abd Elsamie Abd ElHafez – M. Sc. – 2019

Supervisor(s): Dr. Sherif Murad, Dr. Mostafa M. El-Sayed

(Retrofitting techniques; Seismic behavior, Pushover analysis, Fragility curves, Medium-Rise Buildings)

Effect of Steel Fibers On Shear Behavior of Recycled Aggregate Reinforced Concrete Beams

By: Mohamed Hamdy Ewees Genedy – M. Sc. – 2019

Supervisor(s): Dr. Mohamed Rabei, Dr. Ahmed Shabaan Abdel-hai

(RC beams, Shear behavior, Steel fibers, Recycled coarse aggregate, Stirrups)

Utilizing Steel Braces for Seismic Retrofitting of School Buildings with Open Ground Storey

By: Shafik Farid Shafik Elshazly – M. Sc. – 2019

Supervisor(s): Dr. Adel Akl, Dr. Osman Ramadan, Dr. Tarek Sharaf

(School buildings, Soft storey, Seismic analysis, Retrofitting, Pushover analysis)

An Automated BIM Schedule Generation Approach for Solving Time-Cost Trade-off Problem In Construction Projects

By: Mohamed Ezzat Ahmed Kamal ElMenshawy – M. Sc. – 2019

Supervisor(s): Dr. Mohamed Mahdy Marzouk

(Building Information modeling, Automated schedule, 3D Model, Optimization, Genetic algorithm, Time-cost trade-off)

Strengthening of RC Short Columns with External Carbon Fiber Polymers

By: Mahmoud El.Sayed Mahmoud – M. Sc. – 2019

Supervisor(s): Dr. Magdy Kassem, Dr. Nasser El-Shafei

(Reinforced concrete, carbon fiber, finite element models, cohesive zone model, parametric study)

Infrastructure Management of Roadway Traffic Congestion Using Innovative Demand Management Strategies: Case Study of Cairo

By: Mohammed Ahmed Abdallah Thabet – Ph.D. – 2019

Supervisor(s): Dr. Moheeb El-Said, Dr. Hesham Osman, Dr. Hossam Abdelgawad
(Cairo; Capacity management, Congestion pricing, Infrastructure network, Modeling; Peak avoidance rewards, Traffic congestion)

Investigating the efficiency of Using Carbon Fiber Polymer for Strengthening Steel Truss Bridge Members

By: Islam Alaa El-Din Ismail – M. Sc. – 2019

Supervisor(s): Dr. Sherif Murad
(CRFP sheet, Steel truss members, Finite element modeling, ANSYS model, Buckling, Bridge strengthening)

Parametric Study on the Live Load Distribution Factors for Multi-Girder Composite Steel Bridges According to the Egyptian Code for Bridges

By: Mina Kamal Fares Boules – M. Sc. – 2019

Supervisor(s): Dr. Murad. Bakhoun, Dr. Hanan El Tobgy
(Load distribution factors, Composite steel bridges, Structural analysis; Finite element analysis, Egyptian Code for bridges, Loads on bridges)

Assessment of Multistorey Reinforced Concrete Framed Structures Subjected to Fire using AEM

By: Mohamed Samy Youssif El-Bayomy – Ph.D. – 2019

Supervisor(s): Dr. Hamed Hadhoud
(Progressive collapse, Fire, Temperature, ELS, AEM, Material deterioration)

Progressive Collapse Assessment of Precast Prestressed Reinforced Concrete Beams using Applied Elements Method

By: Magdy Mohamed Soliman Mohamed Ahmed Alanani – M. Sc. – 2019

Supervisor(s): Dr. Hamed Hadhoud, Dr. Mariam Ehab
(Applied element method, Precast concrete connections, Progressive collapse analysis, Ordinary moment frames, prestressed)

Influence of Different Beam Span Lengths on The Behavior of Precast Reinforced Concrete Structures Due to Column Removal Scenarios using The Applied Element Method

By: Mohammed Salah Ibrahim Mohammed El-Desoqi – M. Sc. – 2019

Supervisor(s): Dr. Hamed Hadhoud, Dr. Mariam Ehab
(Applied element method, Different Span Lengths, Precast concrete connections, Progressive collapse analysis, Ordinary moment frames)

Numerical Method to Optimize The Addition of Nano Silica Into Concrete Mixture using Artificial Neural Networks

By: Mohamed Safwat Mohamed Osman – M. Sc. – 2019

Supervisor(s): Dr. Osama HodHod
(Concrete mixing, Nano silica; Silica fume, Compressive strength, Artificial neural network)

Comparison Between Different Models of Reinforced Concrete Box Girder Bridge According to Egyptian Code-2012

By: Mustafa Hasan Saeed Abu-Naeem – M. Sc. – 2019

Supervisor(s): Dr. Walid Atiya, Dr. Ahmed Amer

(Box girder bridges, Modeling, Grillage; Shell; Solid; Finite elements, Skew bridges, Curved bridges)

Nonlinear Seismic Analysis of Skewed Bridges with Different Geometry Configurations

By: Khaled Abo-El-Saud Abdel-Latif – M. Sc. – 2019

Supervisor(s): Dr. Atef Gendy, Dr. Osman Ramadan

(Skew bridges, Nonlinear seismic analysis, Concrete bridges)

Shear Strengthening of HSC Beams with Openings Using FRP Composites

By: Sandy Emad Ramzy – M. Sc. – 2019

Supervisor(s): Dr. Hamed Hadhoud, Dr. Sayed Hussien

(RC beams, Beams with openings, FRP sheets, NSM laminate)

Novel Geopolymer Composite for Restoration of Historical Buildings

By: Ehab Mohamed Abd Elmoaty Saed – M. Sc. – 2019

Supervisor(s): Dr. Mohamed Serag

(Geopolymer composite, stones, bond strength, shear strength flexural strength, tensile strength, mode of failure)

Effect of Reinforcement on Punching Shear Behavior of Flat Slab

By: Ahmed Moheib Ibrahim Elhussiny – M. Sc. – 2019

Supervisor(s): Dr. Mohamed Talat Mostafa, Dr. Mohamed Rabei

(Flat slabs, Slab-column connection, Shear reinforcement, Headed shear studs, Punching shear)

Investigating the Effect of Transfer Storey Location on The Value of Seismic Response Modification Factor (R) For Rc Dual System

By: Mostafa ElHussain Mohamed AbdulMonem – M. Sc. – 2019

Supervisor(s): Dr. Walid Atiya

(Response modification factor (R), Transfer storey, Non-linear static pushover analysis, SAP2000)

Framework for Managing Crises in Egyptian Real Estate Development Using System Dynamics Approach

By: Amr Saad Abdel-Latif Hassan – Ph.D. – 2019

Supervisor(s): Dr. Mahdy Marzouk, Dr. Ahmed Saad- Eldien

(Crisis management, Real estate development, System dynamics, Balanced score card)

BIM Based Approach for Modeling Tower Crane Operation Using Agent-Based Simulation

By: Fathy Mahmoud Fathy Mahmoud Hassan – Ph.D. – 2019

Supervisor(s): Dr. Mahdy Marzouk

(Tower cranes, Building information modeling, Agent-based simulation, ELECTRE method)

Investigation of High-Velocity Projectile Penetrating Concrete Blocks Reinforced By Layers of High Toughness and Energy Absorption Material

By: Aya Elsayed Elhozayen – Ph.D. – 2019

Supervisor(s): Dr. Walid Attiya

(Impact, Ballistic, Penetration, Concrete, Energy absorption)

Estimation of Compressive Strength of Reactive Powder Concrete Mixtures Using Computer Programming Algorithm

By: Heba Yahia Youssef Abdel Azim – M. Sc. – 2019

Supervisor(s): Dr. Mohsen Al-Attar, Dr. Ahmed Ragab, Dina Sadek

(RPC, Reactive powder concrete, Compressive strength, Computer algorithm, Modeling, Computer programming)

Alternative Method for Evaluating Progressive Collapse for High Rise Buildings With Transfer Slab

By: Tamer Mohamed Saad Mohamed – M. Sc. – 2019

Supervisor(s): Dr. Ashraf Gamal Eldin

(Progressive collapse, High rise buildings, Transfer slab)

Optimum Water Network Rehabilitation Strategies Using Genetic Algorithms

By: Mohammed Ragab Mohammed Barakat El Shahawy – M. Sc. – 2019

Supervisor(s): Dr. Hesham Osman, Dr. Emad Elbeltagi

(Water networks, Condition assessment, ANN, Optimization, Rehabilitation)

Bi-Level Optimization of Funding Decisions for Infrastructure Networks Renewal Considering Multiple Objectives

By: Hany Mohsen Yehia Mansour – M. Sc. – 2019

Supervisor(s): Dr. Hesham Osman, Dr. Dina Atef

(Infrastructure, Rehabilitation, Fund allocation, Optimization, Multi-objective)

New Definition for Torsional Irregularity Based on Floors Rotations of Reinforced Concrete Buildings

By: Khaled Mohammed Alaa Ibrahim – M. Sc. – 2019

Supervisor(s): Dr. Hamed Hadhoud, Dr. Khaled El-Kashif

(Torsional irregularity, Dual system buildings, Floors rotations And nonlinear dynamic analysis)

Investigating the Efficiency of an Innovative Geopolymer Composites as Repairing Material for Concrete Structures

By: Salma Ahmed Saber Ahmed El Sayed – M. Sc. – 2019

Supervisor(s): Dr. Mohamed Ismail Abdul Aziz

(Geopolymer composite, Repair, Bond, Pull out test, Splitting test)

Design of Steel Plate Girders With Very Thin Webs Under Pure Bending

By: Ahmed Mohamed Ahmed Mohamed Abou Sdira – M. Sc. – 2019

Supervisor(s): Dr. Maheeb Abdel-Ghaffar

(Web slenderness, Plate girder, Buckling, Steel, bending capacity)

Framework for Managing Crises in Egyptian Real Estate Development Using System Dynamics Approach

By: Amr Saad Abdel-Latif Hassan – Ph.D. – 2019

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(Crisis management, Real estate development, System dynamics, Balanced score card)

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(Impact, Ballistic, Penetration, Concrete, Energy absorption)

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(RPC, Reactive powder concrete, Compressive strength, Computer algorithm, Modeling, Computer programming)

Alternative Method for Evaluating Progressive Collapse for High Rise Buildings With Transfer Slab

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(Progressive collapse, High rise buildings, Transfer slab)

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Investigating the Efficiency of an Innovative Geopolymer Composites as Repairing Material for Concrete Structures

By: Salma Ahmed Saber Ahmed El Sayed – M. Sc. – 2019

Supervisor(s): Dr. Mohamed Ismail Abdul Aziz

(Geopolymer composite, Repair, Bond, Pull out test, Splitting test)

Design of Steel Plate Girders With Very Thin Webs Under Pure Bending

By: Ahmed Mohamed Ahmed Mohamed Abou Sdira – M. Sc. – 2019

Supervisor(s): Dr. Maheeb Abdel-Ghaffar

(Web slenderness, Plate girder, Buckling, Steel, bending capacity)

Analytical Study on Flexural Behavior of RC Beams Externally Strengthened With FRP Composites

By: Asem ahmed abdelkader mahdy – M. Sc. – 2019

Supervisor(s): Dr. Hamed Hadhoud, Dr. Khaled Elkashef

(Preloaded RC beams, Strengthening, Fiber reinforced polymers, ACI equation, Preloading factor)

Influence of Thermal Treatment of Cement Kiln Dust on The Reactivity of Geopolymer Slag-Based Composites

By: Rania Samy Saleh Abdel-Aziz – M. Sc. – 2019

Supervisor(s): Dr. Mohamed Ismail

(Thermal treatment, CKD, Slag, Geopolymer composites, Eco-friendly)

Behavior of Reinforced Concrete Deep Beams With openings Using Strut And Tie Model Under Vertical Loads

By: Mahmoud Ali Salah Mahmoud – M. Sc. – 2019

Supervisor(s): Dr. Magdy Kassem, Dr. Rasha Snousi

(Deep beams, Strut and tie model, Finite element model, Openings, Inclined reinforcement)

Optimal Selection of Integrated Project Procurement Strategies

By: Ahmed Salah Ahmed Yehia Mohamed – M. Sc. – 2019

Supervisor(s): Dr. Hesham Osman

(Construction procurement strategy, Case based reasoning, Decision tree, Project procurement, Decision support system, Construction projects planning)

Smart Optimal Seismic Response Control of Boundary Modeled and Analyzed High Rise Structures Using Magnetorheological Dampers

By: Peter Fakhry Fouad Faheem – M. Sc. – 2019

Supervisor(s): Dr. Youssef Rashed

(Structural control; High-rise buildings, MR dampers, Coupled finite-boundary element method, Particle swarm optimization, Genetic algorithm)

The Impact of External Hazards on Power Plants Structures

By: Rania Mohsen Abdel-Haleem Ibrahim Elsebai – M. Sc. – 2019

Supervisor(s): Dr. Hany Abdalla

(Nuclear, Power plant, Vessel, Reactor, Shielding, Buttresses)

Evaluation of Seismic Resistance for An Old Water Structure in Egypt Using Dynamic Testing

By: Rana Nasser Ellaithy Hamed – M. Sc. – 2019

Supervisor(s): Dr. Adel Akl , Dr. Ahmed Hashad

(Dynamic analysis, Seismic analysis, Dynamic testing, Hydraulic structures, Dynamic characteristics, Seismic resistance)

Effect of the Height of Structures on the Force Reduction Factor of Eccentric Braced Frames

By: Amr Magdy Ahmed Ghanem – M. Sc. – 2019

Supervisor(s): Dr. Sherif Murad, Dr. Maha Moddather

(Force Reduction Factor, Ductility Reduction Factor, Seismic Reduction Factor, Eccentric braced frames, Nonlinear Pushover Analysis)

Strengthening of Deficient RC Columns Subjected to Concentric and Eccentric Loads

By: Abdelrahman Hazem Mohamed Ebrahim – M. Sc. – 2019

Supervisor(s): Dr. Hany Abdalla, Dr. Khaled El-Kashif

(Column Strengthening, Deficient RC Column, Eccentric & Concentric Loading, RC Jacket, Steel Jacket, CFRP wrapping)

Progressive Collapse Assessment of Post-Tensioned Reinforced Concrete Flat Slab Structures Using AEM

By: Amgad Alaa Eldin Naeem Mahrous – M. Sc. – 2019

Supervisor(s): Dr. Hamed Hadhoud, Dr. Mariam Ehab

(Column Progressive collapse, Post-tensioned, ELS, AEM, Slabs, Rotation limits)

Experimental Study in Punching Shear Behavior for Lightweight Reinforced Concrete Flat Slabs

By: Marina Alkess Kerollos Ibrahim – M. Sc. – 2019

Supervisor(s): Dr. Mohamed El.said Issa, Dr. Khaled El.kashef

(Punching shear, shear reinforcement, LWC slabs, flat plates, and column)

Strengthening of Reinforced Concrete Deep Beams Using Different Techniques

By: Osama Megahed Ahmed El-Battawy – M. Sc. – 2019

Supervisor(s): Dr. Hany Abdalla , Dr. Khaled El-Kashif

(Deep Beam, Shear Strengthening, CFRP, Strut and Tie, Inclined Stirrups)

Variation, Evaluation and Adjustment Under Construction Contracts - Comparative Study on The Egyptian Law And FIDIC Conditions of Contract

By: Alhussein Mohamed Altaher Mohamed Abdalla – M. Sc. – 2019

Supervisor(s): Dr. Nabil Abd Al Badei, Dr. Tarek Hamed

(Variation, Change, Egyptian Law, Egyptian Civil Code, Egyptian Law of Tender, FIDIC, Administrative Contracts)

Estimating of Site Overheads for Residential Projects in Egypt Using Neural Network Model

By: Ahmed Alaa El-Din Abd El-Razik Ramadan – M. Sc. – 2019

Supervisor(s): Dr. Nabil Abd Al Badei, Dr. Atef Ragab

(Cost Estimation, Site Overheads, Residential, Artificial Intelligence, Neural Network)

Damage Detection of Beams Using Wavelet Transform

By: Sara Abdel Aziz Ibrahim Selmy – PHD – 2019

Supervisor(s): Dr. Sherif Murad, Dr. Atef Bakry, Dr. Ahmed Desoki

(Damage detection, Beams, Wavelet transform, Fundamental mode shape, Numerical studies and experimental work)

Resisting of Punching Shear In Flat Slabs Using Different Techniques

By: Omer Mohammed El Hassan El Mobarak – M. Sc. – 2019

Supervisor(s): Dr. Hany Abdalla, Dr. Rasha Senousi

(Punching shear, Flat slabs design, Shear reinforcement system, Closed stirrups, Embedded steel beams)

Automated Preliminary Structural Design Using Building Information Modeling

By: Rana Abdel Fattah Ahmed – M. Sc. – 2019

Supervisor(s): Dr. Adel Akl

(Role of programming in the development of BIM, Building Information Modeling , Automated preliminary design, Beams design, Columns design, Slabs design, Footing design, Calculating of Quantity, Redesign)

Physical and Mechanical Properties of Meta-Kaolin Geopolymer Bricks

By: Shereen Mustafa Bakr EL-Said – M. Sc. – 2019

Supervisor(s): Dr. Osama Hodhod

(Fly ash, Pottery powder (Meta-Kaolin); Silica fume, Geopolymer bricks)

Developing a Novel Geopolymer Using Marble Dust

By : Basma Abdalla Abdelgadir Osman – M. Sc. – 2019

Supervisor(s): Dr. Osama Hodhod

(Marble dust, Silica fume; Fly ash, Geopolymer paste)

A Risk Assessment Model for Water Treatment and Seawater Desalination PPPs in Egypt

By: Rania Raafat Mohamed Shams El-Din – Ph.D. – 2019

Supervisor(s): Dr. Moheeb El Said, Dr. Hisham Osman, Dr. Maged Georgy

(Public private partnership, Water sector, Risk, Hierarchal fuzzy logic systems, Egypt)

Analyzing Construction Projects Performance Using Big Data Analytics

By: Mohamed Magdy Ahmed Enaba – Ph.D. – 2019

Supervisor(s): Dr. Mahdy Marzouk

(Building information modeling, Data analytics, Data clustering, Association analysis, Text mining, Data visualization)

Shear Behavior of Recycled Aggregate Reinforced Concrete Beams

By: Ahmed Lafi Didan Al Mutairi – Ph.D. – 2019

Supervisor(s): Dr. Hany Abdullah, Dr. Ali Karim Al- Asadi

(Crushed concrete aggregate, Cracks, Shear strength, Reinforced concrete beams)

Using Nano Silica and Steel Fibers to Enhance the Properties of Lightweight Aggregate Concrete

By: Mohamed Abdel Moniem Aly Hamza – M. Sc. – 2019

Supervisor(s): Dr. Mohsen El Attar, Dr. Ahmed Ragab, Dr. Dina Sadek

(Lightweight concrete, High strength concrete, Lightweight aggregate, Nano silica, Steel fibers)

An Efficiency Factor Model of Normal and High-Strength Concrete Bottle-Shaped Struts.

By: Omar Mahmoud Mohamed Elmeligy – M. Sc. – 2019

Supervisor(s): Dr. Mashhour Ghoniem, Dr. Salah El-Din El-Metwally

(Strut-and-Tie model, Efficiency factor, Bottle-shaped struts, ABAQUS, Nonlinear finite element analysis.)

Using Building Information Models For Issuing Electronic Building Permits (E-Permit)

By: Khaled ahmed ahmed Mahmoud – M. Sc. – 2019

Supervisor(s): Dr. Wael Mohamed Khalil El-Degwy, Dr. Mohamed Magdy Abd-Elaziz Noor

(BIM , Permit , Archicad , Electronic chick ; Fornax)

Numerical Simulation of Concrete Walls Strengthened With PTFE Sheets under Blast Load

By: Rawy Adly Youssef Abdel-Malek – M. Sc. – 2019

Supervisor(s): Dr. Walid Attiya, Dr. Mohamed Yassin Laissy

(Concrete, PTFE sheets, Blast load, Fragments, AUTODYN)

Evaluating Response Modification Factor for Reinforced Concrete Shear Wall Structures

By: Mahmoud Mohamed Sayed Mohamed – M. Sc. – 2019

Supervisor(s): Dr. Walid Attiya, Dr. Mostafa El Sayed

(Structure analysis, Seismic analysis, non-linear analysis, Response modification factor, Reinforced concrete shear wall structures)

Flexural Behavior of Composite Reinforced Beams Composed of High Strength and Normal Strength Concrete Hybrid with Geopolymer Composites

By: Ahmed Kareem Salim – M. Sc. – 2019

Supervisor(s): Dr. Mohamed Ismail, Dr. Khaled El-Kashif

(Reinforced, Concrete, Geopolymer composites, Composites system, High strength concrete.)

Behavior of Reinforced Concrete Beams with a Hybrid System of Short and Continuous Steel Fibers

By: Ahmed Abdel Jaleel Obaid – M. Sc. – 2019

Supervisor(s): Dr. Mohamed Ismail

(Reinforced, Concrete, Short steel fiber, Continuous steel fiber, Hybrid system)

Management Reserve valuation for Real Estate Development Project in Egypt

By: Muhammad Yahia Attwa – M. Sc. – 2019

Supervisor(s): Dr. Moheb Elsaed, Dr. Dina saad, Dr. Hatem El-Behairy

(Real estate, Management Reserve, Fuzzy theory, Monte Carlo)

Effect of Brick Walls on Behavior of Concrete Structures

By: Islam Abdel Maksoud Hussein Abdel Maksoud – M. Sc. – 2019

Supervisor(s): Dr .Ashraf El Zanaty

(Infilled frame, Earthquake, RC buildings , Seismic design, SAP 200, Egyptian code)

Seismic Behavior of Retrofitted Steel Moment Connections

By: Moataz Ahmed Abdel Azim Abdallah – M. Sc. – 2019

Supervisor(s): Dr. Sherif Murad, Dr. Hazem Ramadan

(Seismic behavior, Retrofitting, Steel connections)

Contractors Selection in Egypt Using A Fuzzy Logic Approach

By: Marwa Abdel Rahman Aly Mohamed – M. Sc. – 2019

Supervisor(s): Dr. Moheeb El Said, Dr. Emad El Beltagy

(Contractors selection, Fuzzy logic approach, Construction management)

Delay Claims - A BIM and Text Mining Approach

By: Akram Hammam Mohamed Hammam – Ph. D. – 2019

Supervisor(s): Dr. Moheeb El Said, Dr. Omar Al Anwar

(Delay claims, BIM approach, Text mining approach, Construction management)

Concrete Mix Design of Lightweight Self-Compacting Concrete By Using Artificial Neural Network

By: Mohamed Ali Maher Mohamed – M. Sc. – 2019

Supervisor(s): Dr. Osama Hodhod, Dr. Mohsen El attar, Dr. Tamer Elsayed

(Light weight concrete, Self- compacting concrete, Segregation of concrete mix design concrete, Artificial neural network)

AI-Based Automatic Concrete Cracks Detection Using Deep Convolution Neural Networks

By: Mohamed Mostafa Sobhy Elmorsy – M. Sc. – 2019

Supervisor(s): Dr. Sherif Murad, Dr. Hazem Elanwar

(Artificial intelligence, Concrete cracks detection, Image processing, Machine learning, Neural networks, Deep convolution neural networks)

Assessment of Progressive Collapse Capacity of Dual Steel Concentrically Braced Frames with Semi-Rigid Connection

By: Abdullah Mohammed Mahmoud AL-Saied AL-Falahgy – M. Sc. – 2019

Supervisor(s): Dr. Sherif Murad, Dr. Maha Moddather

(Progressive collapse, Steel bracing moment resisting frame, Spring component model, Rigid connection; Semi-rigid connection, Extended end-plate, Linear time-history analysis)

Strengthening of R.C. Flat Slabs with Cut-Out Edge Openings

By: Faisal Walid Hafez – M. Sc. – 2019

Supervisor(s): Dr. Hany Abdalla, Dr. Khaled El Kashif

(Strengthening, R.C. flat slab, Edge opening, Steel bars, Steel plates, CFRP sheets, ECC)

Structural Behavior of Concrete Sandwich Panel Walls with Openings under Vertical Loads

By: Eslam Magdy Youssef Amin Saleh – M. Sc. – 2019

Supervisor(s): Dr Ahmed Ragab, Dr. Mohsn El-Attar, Dr. Mohamed Khafaga

(Concrete sandwich panels, Walls with opening, Axial loads, Structural walls)

Evaluation of Seismic Response Modification Factor Based on Nonlinear Static Analysis For Reinforced Concrete Frames With Transfer Slab

By: Mina Ibrahim Fahmy Salib – M. Sc. – 2019

Supervisor(s): Dr. Walid Attiya

(Nonlinear static analysis, Response modification factor, Transfer slab, Plastic hinge, pushover analysis curve)

Investigation Projectile Penetration in Concrete Blocks Reinforced by Aluminum

By: Eman Mohamed Mostafa Mahmoud – M. Sc. – 2019

Supervisor(s): Dr. Walid Attiya, Dr. Mohamed Laissy

(Penetration, Concrete, Projectile, Aluminum, AUTODYN 3D)

Effect of Rectangular Web Opening for Slender Beams with Variable Web Depth Under flexural Load

By: Mai Mohamed Abdel hameed Sheta – M. Sc. – 2019

Supervisor(s): Dr. Fouad Fayed, Dr. Mohamed EL Saadawy

(Straight -tapered steel girder, Slender web, Non-linear analysis, Web opening, Straight -tapered steel girder with stiffened web , Finite element method)

Flexural Behavior of Two-span Reinforced Concrete Beams Subjected to Selected Face Corrosion After Initially Loaded Experimental and Finite Element

By: Hassan Ahmed Hassan – Ph.D. – 2019

Supervisor(s): Dr. Osama Hodhod, Dr. Mohsen El-Attar, Dr. Abdel Moneim Sanad

(ABAQUS, Chlorides, Concrete, Corrosion, Finite element analysis, Reinforcement)

Size Effect on Shear Strength of Normal and Wide Beams With Normal and High Strength Concrete

By: Mohamed Gamil Elsayed Megahed – Ph. D. – 2019

Supervisor(s): Dr. Nabil Yehia

(shear strength, concrete beams, size effect)

2018

Synthesis and Technology of Highly Resistant Sea Water Hybrid System Concrete

By: Shereen Fathy Ahmed Darwish – M.Sc. – 2018

Supervisor(s): Dr. Mohamed Ismail

(Geopolymer, Sea water resistance, Slag, Concrete durability, Hybrid system concrete)

A Proposed Method to Reduce Vulnerability of Steel Moment Resisting Frames to Progressive Collapse

By: Mina Daa Shoukry Nageeb – M.Sc. – 2018

Supervisor(s): Dr. Sherif Murad, Dr. Maha Moddather

(Progressive collapse, Steel moment resisting frame, Linear static analysis, Linear dynamic analysis, Time history)

Bending Behavior of Composite Ferro-Cement Slabs in Cold Formed Steel Floors

By: Adham Elsayed Zakaria Tonsy Mohamed – M.Sc. – 2018

Supervisor(s): Dr. Metwally Abou-hamd, Dr. Sameh Mahfouz

(Ferro-cement slabs, Shear connector, CFS section, Wire mesh)

Effect of Earthquakes on Piles Embedded in a Liquefiable Soil

By: Noha EL saeid Mostafa EL Fiky – M.Sc. – 2018

Supervisor(s): Dr. Adel Akl, Dr. Kamal Ghamery

(Liquefaction, ANSYS, CPT215, Earthquakes, Vertical ground motion)

Physico-Mechanical and Thermal Performance of Solid Cement Bricks Containing Waste Tire Rubber

By: Amr Shaban Hassan Moustafa – M. Sc. – 2018

Supervisor(s): Dr. Ahmed Ragab, Dr. Mohsen El-Attar, Dr. Dina Sadek

(Tire rubber, Solid cement bricks, Compressive strength, Thermal performance, Heat/cool cycles)

Planning and Optimizing Tower Cranes Operations in Construction Sites Using Agent Based Simulation

By: Ahmed Younes Ahmed Zaki – Ph. D. – 2018

Supervisor(s): Dr. Mahdy Marzouk

(Tower cranes, Layout planning, Agent based simulation, Activity conflicts, Optimization)

A Probabilistic Approach for the Seismic Response Assessment of Precast Beam Bridges with A Buffer-Gap-Elastomeric Bearings System Considering Uncertainties in Modeling Parameters

By: Mousa Maher Nagiub Farag – Ph. D. – 2018

Supervisor(s): Dr. Murad Bakhom ,Dr. Sameh Mehanna, Dr. Dimitrios Vamvatsikos

(Bridges, Buffer-gap-elastomeric bearings system, Conditional spectrum record selection, Latin hypercube sampling (LHS), Uncertainties in modeling parameters)

Developing an Integrated Risk Management System for Evaluation PPPs Projects in Libya

By: Mahmoud Ali Omar Elhessnawi – Ph. D. – 2018

Supervisor(s): Dr. Mahdy Marzouk

(Fault tree , Neural networks , Analytical network Process , Public/private partnerships, Decision support system)

[A Risk Based Maintenance Approach for Water Treatment Plants](#)

By: Rasha Moawad Ahmed Abd El Maksoud – Ph. D. – 2018

Supervisor(s): Dr. Mahdy Marzouk

(Risk based maintenance, Fuzzy fault tree analysis, Laser scanning)

[Quantitative Assessment of Highways Concrete and Asphalt Pavements Using Multi-Criteria Decision Making](#)

By: Mohamed Moustafa Mohamed Abdel-Moneim Ashmawy – M. Sc. – 2018

Supervisor(s): Dr. Mahdy Marzouk

(Concrete highways, Asphalt highways, Lifecycle cost analysis, Multi-criteria decision making)

[An Innovative Environmentally Friendly Lightweight Aggregates produced By Utilizing Cement Kiln Dust and Other By- Product Materials](#)

By: Sara Ibrahim Mahmoud Ahmed Sayed – M. Sc. – 2018

Supervisor(s): Dr. Mohamed Ismail

(Cement kiln dust, Slag, Lightweight aggregate, Thermal treatment, Geopolymer)

[Measuring Construction Performance in Public Private Partnership Projects](#)

By: Emad Fayez Gayed Abd El-Said – Ph. D. – 2018

Supervisor(s): Dr. Mahdy Marzouk, Dr. Moheb El Said

(Public private partnership, Key performance indicators, Concession, Construction performance, Principal component analysis)

[An Innovative Technology for Producing Eco-Friendly Geo-polymer compressed Earth Blocks](#)

By: Nouran Mohammed Abdelfatah Mohammed – M. Sc. – 2018

Supervisor(s): Dr. Mohamed Ismail, Dr. Mohamed Samy El-Feky

(Compressed earth block, Vibrated (CEBs), Slag, CKD, Geo-polymer earth blocks)

[Seismic Behavior of Cold-Formed Steel Shear Walls Sheathed by Fiber Cement Board Panels](#)

By: Ahmed Mohamed Ragae Kotp Mohamed Badr – M. Sc. – 2018

Supervisor(s): Dr. Sherif Murad, Dr. Hazem Al-Anwar

(Blast loading, Moment-curvature, RC panels, Single degree of freedom, Load-deflection)

[Multi-Objective Optimization of Steel Floors Against Cost and Embodied Energy](#)

By: Ahmed Magdy Mohamed El-Sayed – M. Sc. – 2018

Supervisor(s): Dr. Sherif Safar, Dr. Mahdy Marzouk, Dr. Hazem Al-Anwar

(Multi-objective, Optimization, Steel, Cost, Embodied energy)

[Flexural Capacity of Mono-symmetric Steel I-Beams strengthened with CFRP Sheets](#)

By: Omar Hassan Omar Hassan Elkhabeery – Ph. D. – 2018

Supervisor(s): Dr. Sherif Murad, Dr. Sherif Safar

(CFRP, Debonding, Mono-symmetric, Steel I-beams, Strengthening)

[Fatigue Behavior of Dented SubSea Steel Pipelines](#)

By: Mohamed Mohamed Said Eladly – Ph. D. – 2018

Supervisor(s): Dr. Ahmed Farouk, Dr. Mohamed Sorour

(Residual stress, Fatigue, Sea storm waves, Indentation, Steel pipeline)

Investigation of Mechanical Properties of Concrete Containing Recycled Rubber from Waste Tires

By: Ahmed Zaki Saber Zaki – M. Sc. – 2018

Supervisor(s): Dr. Hossam Hodhod ,Dr. Hatem Ibrahim

(Mechanical properties, Rubberized concrete, Fine rubber, Coarse rubber, Scrap tires)

Behavior of Concrete Encased Steel Columns Under Axial Concentric Load

By: Motaz Salah Sayed – M. Sc. – 2018

Supervisor(s): Dr. Ashraf El Zanaty, Dr. Tamer El Afandy

(Composite column, Concrete encased column, Structural steel, Confinement, Shear connector)

Proposed Method for Cost Assessment of Seismic Mitigation Designs for Reinforced Concrete Building

By: Yasser Mohamed Abdel Hameed Fayed – M. Sc. – 2018

Supervisor(s): Dr. Mohamed Sobaih, Dr. Yasser El-Hakeem

(Performance based analysis, Pushover analysis, Cost assessment, Crack width.)

Non-linear Analysis of Composite Steel Battered Columns Using Foam Concrete

By: Yasser Salah Ibrahim Abdel Majeed – M. Sc. – 2018

Supervisor(s): Dr. Maheeb Abdel Ghaffar

(Composite columns buckling, Critical load, Battered steel columns, Foam concrete, Non-Linear analysis.)

Assessment of the Behavior of Reinforced Concrete Panels Subjected to Blast Loads

By: Rania Osama Ali Abdel Fattah Saleh – M. Sc. – 2018

Supervisor(s): Dr. Sherif Mourad, Dr. Mostafa M. El Sayed

(Blast loading, Moment-curvature, RC panels, Single degree of freedom, Load-deflection)

Construction Stage Modeling and Analysis of Prestressed Concrete Cable-stayed Bridge

By: Shady Kamel Esmail El Shafai – M. Sc. – 2018

Supervisor(s): Dr. Walid Atiya, Dr. Ehab Khalil

(Construction stage, Modeling, Cable-stayed bridge, Construction analysis)

Concrete Retempering and Its Effect on Concrete Properties

By: Reham Maged Hussien Kotib – M. Sc. – 2018

Supervisor(s): Dr. Metwally Abd Aziz, Dr. Mohamed Abdel Salam Arab

(Retempering, Normal strength, High strength, workability, compressive strength.)

Properties of Self-Compacting Self-Curing Concrete

By: Fatma Ramadan Mahmoud – M. Sc. – 2018

Supervisor(s): Dr. Metwally Abdel Aziz, Dr. Mohamed Abdel Salam Arab

(High strength, Self-curing, self-compacted, Super absorbed polymer, Polyethylene glycol)

Nonlinear Behavior of Reinforced Concrete Frames Subjected to Lateral Cyclic Load and Proposed Methods to Enhance Their Performance

By: Dina Ali Abdelaziz Hussein – M. Sc. – 2018

Supervisor(s): Dr. Metwally Abdelaziz, Dr. Ahmed Fathy Zidan

(RC frames, Cyclic loading, Nonlinear analysis, ANSYS16.0, Soil structure interaction)

Finite Element Modeling of RC Shear Walls Strengthened With CFRP Subjected To Cyclic Loading

By: Ayman Kamal Adly Abdel Maksoud – M. Sc. – 2018

Supervisor(s): Dr. Hany Abdalla, Dr. Khaled El-Kashif

(RC shear walls, Seismic behavior, CFRP sheets, Cyclic loading, ANSYS)

Inelastic Behavior of Shear Wall-Frame Structural System under the Effect of Seismic Loads

By: Ola Ezzat Hassan Ali – M. Sc. – 2018

Supervisor(s): Dr. Walid Attiya, Dr. Bahaa Hanafy

(Seismic analysis, Pushover analysis, Time history analysis, Inelastic behavior, Base shear)

Experimental Investigation of Strengthening Slab-Column Connections With CFRP Fan

By: Eman Abdel Ghaffar Ahmed Eissa – M. Sc. – 2018

Supervisor(s): Dr. Hamed Hadhoud, Dr. Khaled El-Kashif

(Punching shear strengthening, Flat slabs, RC, CFRP string)

Numerical Analysis of the Behavior of Precast L-Shaped Beams

By: Ahmed Mostafa El Saied Ali Ghanem – M. Sc. – 2018

Supervisor(s): Dr. Adel Akl

(Nonlinear analysis, Finite element, Skew bending failure, Precast beams, Prestressed beams)

Analytical Study on Reinforced Concrete Barbell Shear Walls

By: Mahmoud Ahmed Sayed Saied – M. Sc. – 2018

Supervisor(s): Dr. Hany Abdalla, Dr. Khaled El-Kashif

(Shear wall behavior, Barbell shear wall, Confinement of shear wall, Boundary columns of shear wall)

Investigation of the Fundamental Period of Reinforced Concrete Mid-Rise Buildings

By: Ahmed Nader Mohamed Hanafy Salem – M. Sc. – 2018

Supervisor(s): Dr. Hamed Hadhoud, Dr. Khaled El-Kashef

(Fundamental period of vibration, Moment resisting frames, shear wall buildings)

Effect of Soil in Redistribution of Loads Due to Collapse of a Column

By: Ahmed Hassan Mohamed Ibrahim Nada – M. Sc. – 2018

Supervisor(s): Dr. Sherif Murad, Dr. Sherif Akl

(Progressive collapse, ABAQUS, Reinforced concrete, Soil, Plasticity)

Boundary Element Formulations for Nonlinear Soil-Structure Interaction

By: Ahmed Fady Mahmoud Farid – Ph. D. – 2018

Supervisor(s): Dr. Youssef Rashed

(Boundary element method, Soil-structure interaction, Nonlinear analysis, piled raft, Overall building analysis)

Analytical Evaluation Study of the Behavior of Structures Subjected to Blast Loads

By: Ahmed Abdel Bari Mahdi Emarah – Ph. D. – 2018

Supervisor(s): Dr. Abdel Hamid Zagho, Dr. Kamal Ghamry

(Blast, LSDYNA, Control displacement, UFC and arching walls)

A Multilayer Optimization Scheme for Lattice Steel Structures

By: Mostafa Mohamed Naiem Abdel Moaty – M. Sc. – 2018

Supervisor(s): Dr. Hisham Sobhy, Dr. Hazem Al Anwar

(Steel structures, Multilayer optimization, Interior point method, Topology optimization)

Investigations of RC Structures Subjected to Blast Loads

By: Ahmed Ashraf Hanafy Said – M. Sc. – 2018

Supervisor(s): Dr. Waleed Atiya, Dr. Mostafa El Sayed

(Blast loads, Moment curvature, Damage level, Progressive collapse)

Development and Evaluation of New Proposed Modules for Deployable Tension-Strut Structures

By: Abdel Rahman Abdel Alim Abdel Wahab Taha – M. Sc. – 2018

Supervisor(s): Dr. Adel Akl

(Deployable structures, Structural mechanisms, Cable-strut structures, Tension-strut structures)

Value Engineering Application in Restoration and Rehabilitation of Heritage Buildings

By: Essam Mesbah Abou-Elfetouh – M. Sc. – 2018

Supervisor(s): Dr. Mahdy Marzouk

(Heritage buildings, Rehabilitation, Value engineering, Restoration techniques, Multi-criteria Decision making)

Punching Shear Behavior of RC Flat Slabs with Embedded Steel Beams

By: Bassem Khaled Abdel Aziz Mohamed – M. Sc. – 2018

Supervisor(s): Dr. Hany Abdallah, Dr. Rasha Snousy

(Embedded steel beams, Punching shear, RC flat slabs, Shear reinforcement system)

Nonlinear Seismic Analysis of RC Coupled Shear Walls

By: Islam Hussain Ahmed Hussain – M. Sc. – 2018

Supervisor(s): Dr. Waleed Atiya, Dr. Bahaa El Din Hanafy

(Coupling beams, Coupled shear walls, Time history analysis, pushover analysis, Highrise buildings)

Quantitative Analysis for Contractors' Risks Cost Under the Umbrella of the Yemeni and FIDIC Contracts Using Monte Carlo Simulation

By: Ahmed Mohamed Abdullah Amer – M. Sc. – 2018

Supervisor(s): Dr. Moheeb El Said, Dr. Ahmed El Dokhmasey

(Monte Carlo simulation, Cost contingency, Yemeni contract, FIDIC contract, Quantitative analysis, Probability distribution)

A Proposal of Sections Classification Considering Web Slenderness of Beam Sections in The Egyptian Code (ECP – LRFD)

By: Ahmed Mohamed Abdel Rahman Massoud El Ebiary – Ph. D. – 2018

Supervisor(s): Dr. Waleed Atiya, Dr. Manar Maher

(Composite girders, Ultimate flexural strength, Finite element Analysis, Material nonlinearity, Parametric study, ANSYS)

A Computer-Aided Visualization and Design Tool for Vertical Elements in Tall Buildings

By: Ahmed Mohmoud Mostafa Hasan – M. Sc. – 2018

Supervisor(s): Dr. Youssef Rashed

(Computer-aided visualization, Vertical elements, Tall buildings)

Repair of R.C. Beams Subjected to Torsion Using CFRP Sheets

By: Wassim Badri Domat – M. Sc. – 2018

Supervisor(s): Dr. Hany Abdallah, Dr. Ghada Diaa
(RC beams, CFRP sheets, Torsion, Repair, Twisting angle)

Evaluation of Code Required Separation Distance between Adjacent RC Flat Slab Mid-Rise Buildings

By: Hosam El Din Mohamed Gamal Mahmoud – M. Sc. – 2018

Supervisor(s): Dr. Waleed Atiya, Dr. Ahmed Amer, Dr. Mostafa El Sayed
(Performance evaluation, Pounding, Gap distance, Fragility curves, Code requirements)

Effect of Overload Vehicles on Behavior of Cable Stayed Bridges

By: Mohamed Atef Ghobashi Aly – M. Sc. – 2018

Supervisor(s): Dr. Waleed Atiya, Dr. Ahmed Amer
(Cable-stayed bridges, overload vehicles, Bridge behavior)

Nonlinear Numerical Simulation for the Behavior of Reinforced Concrete Loaded Beams Subjected to Fire

By: Mohamed Ayman Mosaad El-Shourbagy – M. Sc. – 2018

Supervisor(s): Dr. Adel Akl
(Nonlinear simulation, Finite element, Fire test, Concrete beams, Coupled thermal-structural Response)

Behavior of Unreinforced Limestone Brick Walls with Openings Under In-Plane Axial Loads

By: Amr Mohamed Salah Zeid Sherif – M. Sc. – 2018

Supervisor(s): Dr. Hamed Hadhoud, Dr. Ghada Diaa
(Limestone brick walls, In-plane axial loads, Behavior of unreinforced brick walls)

Behavior of Concrete Encased Steel Composite Columns Under Uniaxial Load

By: Mohamed Magdy Mohamed – M. Sc. – 2018

Supervisor(s): Dr. Ashraf El Zanaty, Dr. Tamer Hasan El Afandy
(Composite columns, uniaxial load, Shear connections, Internal ties)

Punching Shear Behavior of Flat Slabs Reinforced with Special Shear Reinforcement

By: Yehia Adel Abdel Rahman Ahmed – M. Sc. – 2018

Supervisor(s): Dr. Hany Abdallah, Dr. Rasha Snousy
(Punching shear, Punching shear reinforcement, Chairs reinforcement, Flat slab design)

Suspension Bridge Stability Analysis with Inclined Plane of Cables

By: Dina Mostafa Sadek Mahmoud Shaalan – M. Sc. – 2018

Supervisor(s): Dr. Waleed Atiya, Dr. Ehab Khalil
(Suspension bridges, Stability analysis, Bridge cables)

Numerical Study on Seismic Behavior Requirements for Steel Plate Shear Walls

By: Rehab Magdy El Said Resq – M. Sc. – 2018

Supervisor(s): Dr. Sherif Mourad, Dr. Mohamed Hassanien Sorour
(Shear strength, SPSW, Column, Tension field, Stiffener)

Integrating Last Planner System and Critical Path Method in Construction Projects Planning

By: Amr Mohamed Mousa Ali Shalaby – M. Sc. – 2018

Supervisor(s): Dr. Mahdy Marzouk, Dr. Omar Al Anwar

(Last planner system LPS, Critical path method, Planning technique, Scheduling technique, Scheduling software)

Seismic Behavior of Dual Moment-Eccentric Braced Frames with Replaceable Shear Links

By: Amir Ahmed Hasan Gomaa – M. Sc. – 2018

Supervisor(s): Dr. Ashraf Gamal El Din Osman

(Eccentric braced frame, Dual systems, Sismic behavior, Self-centering)

Behavior of Reinforced Concrete Beams with Openings Subjected to Pure Torsion

By: Taha Mohammed Abdullah Abdo – M. Sc. – 2018

Supervisor(s): Dr. Magdy Kassem, Dr. Rasha Snousy

(Pure torsion, Web opening, Reinforced concrete beams, Angle of rotation, Finite element analysis)

Influence of Nano-Clay on the Behavior of Recycled Aggregate Concrete

By: Ezzat Gazy Alhamad – M. Sc. – 2018

Supervisor(s): Dr. Ahmed Ragab, Dr. Mohsen El-Attar, Dr. Dina Sadek

(Recycled aggregate concrete, Nano-clay, Mechanical properties, Physical properties, Scanning electron microscope)

Response of Pile Group Subjected to Vertical and Lateral Loading – Three Dimensional Numerical Study

By: Amira Fouad Ismail Mohamed – M. Sc. – 2018

Supervisor(s): Dr. Metwally Abdelaziz, Dr. Ahmed Fathy Zidan

(Pile, Laterally loaded pile, Numerical analysis, Soil, P-y curve)

Numerical Investigation on Compressive Strength of Columns with Elliptic Hollow Cross-Section

By: Adel Abdullah Mohammed Musleh – M. Sc. – 2018

Supervisor(s): Dr. Sherif Safar

(Elliptical hollow section, Compression strength, Flexural buckling, Local buckling, Slenderness ratio, Geometric imperfection, Non-linear analysis)

Nonlinear Dynamic Analysis of Reinforced Concrete Rock Sheds with Sand Cushions

By: Hesham Adel Abd El-Rahman – M. Sc. – 2018

Supervisor(s): Dr. Hamed Hadhoud

(Impact load, Structural dynamics, Applied element method, Dynamic increase factor (DIF))

Effect of Shear Connectors and Interface Roughness on the Behavior of Two Way Composite Pre-Slabs

By: Mahmoud Hisham Hassan El-Meligy – M. Sc. – 2018

Supervisor(s): Dr. Mohamed Rabie, Dr. Wael Salah El-Din

(Concrete, Pre-slabs, Interface roughness, Shear connectors, Shear transfer)

Recycling of Waste Materials in Production of Self-Compacting Concrete

By: Mohamed Fatouh Nasr Abou El Dahab – M. Sc. – 2018

Supervisor(s): Dr. Hossam Hodhod

(Self-compacting concrete, Sustainable construction, High-fluidity concrete, Green concrete)

Numerical Analysis on Shear Behavior of High Strength Concrete Beams with Openings

By: Mahmoud Hegazy Bassiony Fouda – M. Sc. – 2018

Supervisor(s): Dr. Hatem Mostafa

(Shear behavior, High strength concrete, Beams with openings)

Effect of Stiffening Types on Steel Beams with Web Openings

By: Basma Mohamed Ahmed Abdel-Rahman Allam – M. Sc. – 2018

Supervisor(s): Dr. Maheeb Abdel-Ghaffar, Dr. Kamal Ghamery

(Steel beams, Web openings, Stiffeners, Finite element, Nonlinear analysis)

Experimental Study on Cracked Steel Plates with Different Damage Levels Strengthened by CFRP Laminates

By: Mohamed Ahmed Shafik El Awady – M. Sc. – 2018

Supervisor(s): Dr. Sherif Murad, Dr. Maha Moddather

(Carbon fiber reinforced polymer laminates, Fatigue, Repaired fatigue cracks, Repaired steel plates)

Risk Allocation in Egyptian Construction Industry: Case Studies in View of Fidic Forms

By: Nefert Salah Moussa – M. Sc. – 2018

Supervisor(s): Dr. Nabil Abdel Badie, Dr. Tarek Hamed

(Risk allocation, FIDIC, Civil law, Contracts)

Structural Behavior of Beams Combining Ultra High Strength Concrete and Normal Strength Concrete

By: Ahmed Mohamed Ismail Abu Gahin – Ph. D. – 2018

Supervisor(s): Dr. Ahmed Ragab, Dr. Mohamed Mohsen El-Attar, Dr. Hosam El-Karmouty

(Ultra high strength concrete, Composite sections, Static loads, Beams)

Structural Behavior of Cold-Formed-Steel Shear walls Sheathed with Ferro-Cement Boards

By: Basel Mohamed El Samman Ahmed – Ph. D. – 2018

Supervisor(s): Dr. Metwally Abu-Hamd, Dr. Maheeb Abdel-ghaffar

(Cold-formed steel, Experimental, Shear walls, Ferro-cement, Finite-element)

Development of A Client-Based Decision Support System for the Project Success Evaluation In Egypt

By: Yasser Wafik Mohamed El Eraky – Ph. D. – 2018

Supervisor(s): Dr. Moheeb El Said

(Construction management, Critical success factor, Client-based design support system, Governmental projects)

Assessment of Cracks in Reinforced Concrete Beams Using Artificial Intelligence Techniques

By: Ahmed Ayman Ahmed Shaheen – Ph. D. – 2018

Supervisor(s): Dr. Ahmed Farahat, Dr. Mahdy Marzouk

(Crack detection, image processing, Artificial neural networks, Expert systems)

Proposed Method for the Seismic Analysis and Design of Concrete Barrages in Egypt

By: Amr Abdelbaset Hamed Mahmoud – M. Sc. – 2018

Supervisor(s): Dr. Ezzat Sobaih, Dr. Yasser El-Hakeem

(Seismic analysis, Seismic design, barrages, response modification factor, modal pushover analysis)

Cost Contingency Estimation for Highway Construction Projects in Egypt

By: Hani Samir Soliman Ghattas – M. Sc. – 2018

Supervisor(s): Dr. Moheeb El-Said, Dr. Ahmed Saad El-Deen

(Cost contingency, Risk, Highway, Delphi)

The Effect of Carbon Nanotubes Addition to Reactive Powder Concrete on the Compressive and Flexural Strength Using Different Types of Superplasticizer

By: Yasser Murad Mohamed Matar – M. Sc. – 2018

Supervisor(s): Dr. Mohamed Ismail Serag, Dr. Hala El-kady

(Carbon nanotubes, Superplasticizer, flexural strength, compressive strength, reactive powder concrete)

Effect of Adding Metakaolin and the Technique of Addition on the Properties of Concrete Hybrid with Geopolymer Composite

By: Areeg Salah Eldin Mohamed Elhadad – M. Sc. – 2018

Supervisor(s): Dr. Mohamed Ismail Serag, Dr. Emad Mohamed

(Hybrid concrete, Metakaolin, Compressive strength, alkaline solution, Geopolymer composite, Workability)

Investigating the Effect of Nano Silica on Reactive Powder Concrete Subjected to Different Curing Regimes

By: Amal Ahmed Mohamed Farahat – M. Sc. – 2018

Supervisor(s): Dr. Mohamed Ismail Serag, Dr. Hala Elkady

(Nanosilica, Lime curing, Super plasticizer, Reactive power concrete, Polycarboxylate).

Effect of Flexural and Shear Reinforcement on the Punching Behavior of Reinforced Concrete Flat Slabs

By: Amr Bakr Ismail Fag El-Nour – M. Sc. – 2018

Supervisor(s): Dr. Hany Abdallah, Dr. Rasha Snousy

(Flexural reinforcement, Shear reinforcement, Punching behavior, Flat slabs, crack pattern)

Behaviour of RC Members Subjected to shear with Background to Provisions of the New Edition of ECP 203

By: Ahmed Abdel Monem Saleh Bayoumy – M. Sc. – 2018

Supervisor(s): Dr. Mashhour Ghoneim, Dr. Osman Ramadan

(RC members, Shear strength, Shear walls, Dynamic loads, Edition of ECP 203)

Assessment of Steel Corrosion Performance of Concrete Mixtures Made of Egyptian Blended Cements

By: Mohamed Atef Ibrahim Reyad – Ph. D. – 2018

Supervisor(s): Dr. Osama A. Hodhod, Dr. Mohamed M. El-Attar

(Slag cement, Fly ash, Impressed current, Accelerated corrosion technique, Lollipop, Water permeability, Rapid chloride penetration, Pull-out)

A Framework for Developing City Sustainability Rating System

By: Ahmed Hamdy Abd-Elkhalik Abd-Elhamid – Ph. D. – 2018

Supervisor(s): Dr Mohamed Mahdy Marzouk, Dr. Mohamed El Zayat
(Sustainability, Sustainability indicator, City rating system, Sustainable city, Sustainability assessment)

Integrated Model for Measurement, Evaluation and Forecasting the Performance of Construction Projects

By: Hany Leon Zaki Iskander – Ph. D. – 2018

Supervisor(s): Dr. Moheeb El-Said Ibrahim, Dr. Hesham Maged Osman, Dr. Maged Georgy
(Construction; Performance Indices, Measurement; Evaluation; Forecasting)

Modeling Investment Policies in Egyptian Construction Sector Using System Dynamics

By: Karim Mohamed Fattouh Shebl – M. Sc. – 2018

Supervisor(s): Dr. Mohamed Mahdy Marzouk
(Emissions, System dynamics, Labor education, Construction technology)

Experimental Behavior of Flexural Strengthening of Preloaded Reinforced Concrete Continuous Beams

By: Amira Adel Abdel Hameed Radwan – M. Sc. – 2018

Supervisor(s): Dr. Hamed Salem Hadhoud, Dr. Khaled Farouk Omar
(Flexural strengthening, Preloaded RC continuous beams, RC layers, CFRP sheets)

A Computer Based System for Risk Assessment and Mitigation Cost of Labor Productivity in Construction Projects in Egypt

By: Amr Ahmed Mohamed Mostafa – M. Sc. – 2018

Supervisor(s): Dr. Moheeb El-Said Ibrahim, Dr. Ahmed El Dokhmasey
(Computer-based model – Risk assessment – Labor productivity risk – Mitigation cost)

Mechanical Properties and Durability Aspects of Geopolymer Concrete Using Ground Granulated Blast Furnace Slag

By: Mostafa Mahmoud Boshra Elewa – M. Sc. – 2018

Supervisor(s): Dr. Ahmed Maher Ragab, Dr. Mohamed Mohsen El-Attar
(Geopolymer concrete, Blast furnace slag, Mechanical properties, Durability, Sulfate attack)

Investigating the Effect of Prestressing Force on the Value of Seismic Response Modification Factor (R) for Moment Resisting Frames

By: Mahmoud Mohamed Nabil Maher Ashoub – M. Sc. – 2018

Supervisor(s): Dr. Walid Attiya
(Response modification factor (R), Prestressed concrete, Non-linear static pushover analysis, SAP 2000)

Parametric Study on Punching Shear of Post-Tensioned Flat Plates

By: Amr Reda Abdel-Kader Abdel-Lateef – M. Sc. – 2018

Supervisor(s): Dr. Osman M. Ramadan, Dr. Hatem Mostafa
(Punching shear, ANSYS, Prestressing, Flat plate, Slab column connections)

Experimental Investigation of The Effect of Top, Middle, and Bottom Mesh Reinforcement Ratio at Different Concrete Strengths on the Punching Shear Capacity of R.C. Flat Slabs

By: Ahmed Taha Mohamed Omar – M. Sc. – 2018

Supervisor(s): Dr. Osama A. Hodhod , Dr. Hatem H. Ibrahim

(Punshing shear, RC flat slabs, Mesh reinforcement ratio, Different concrete strengths)

Numerical Investigation on Flexural Strength of Cantilevered Circular Steel Hollow Sections

By: Abdel-Rahman Mostafa Mohamed El-Mahdy Abdel-Ghaffar – M. Sc. – 2018

Supervisor(s): Dr. Sherif Mourad, Dr. Sherif Safar

(Circular steel hollow sections, Finite element analysis, Diameter-to-thickness ratio, Nonlinear analysis and initial geometrical imperfections)

Proposed Changes to Seismic Design Provisions of Framed Structures in the Egyptian Code for Design and Construction of Concrete Structures (ECP203-2007)

By: Yasser Abdel Azeem Abdel Basset – M. Sc. – 2018

Supervisor(s): Dr. Mashhour Ghoneim, Dr. hatem Abdel Aal Selim

(Seismic design, Reinforced concrete framed structures, Egyptian code for design and construction of concrete structures, ductility)

The Influence of Nano-Silica and Nano-clay on Mechanical Properties and Durability of Concrete

By: Khadiga Mahmoud Abdel Mageed Mekky – M. Sc. – 2018

Supervisor(s): Dr. Mashhour Ghoneim, Dr. Kamal sharobim

(Nano-silica, Nano-clay, Mechanical properties, Durability, Rapid chloride penetration)

Critical Comparative Study with Essential Modifications for Treating Deficiencies in the Egyptian Code for Fire Protection of Structures and Relevant Existing Legislations (in Arabic)

By: Rania Farouk Mohamed Mohamed Abo-Dagher – Ph. D. – 2018

Supervisor(s): Dr. Mahmoud Reda Youssef, Dr. Ahmed Ragab, Dr. Mohamed El-Attar

(Egyptian code of fire protection, critical comparative study, Emirates code of fire, Relevant legislations, Resistance of RC buildings to fire)

Predicting Building Life Cycle Sustainability Behaviour Using System Dynamics

By: Mostafa Mohamed Salah El Din El Hawwary – Ph. D. – 2018

Supervisor(s): Dr. Mohamed Mahdy Marzouk

(Rating Systems, Green Buildings, Building Sustainability, System Dynamics, Principal Components Analysis)

Seismic Analysis of Two Adjacent RC Frame Buildings Connected by FVD

By: Mohamed Sami Mohamed Abdel Aziz El Zeini – M. Sc. – 2018

Supervisor(s): Dr. Bahaa Eldin Hanafy

(Seismic analysis, Adjacent buildings, Fluid viscous dampers, Vibration control, Connected buildings)

Critical Factors Effecting On Delay Time In Residential Construction Projects

By: Dalia Ahmed EL-Badawy – M. Sc. – 2018

Supervisor(s): Dr. Moheeb El-Said Ibrahim, Dr. Saeed Ahmed El-Sheikh

(Construction delays, Residential construction projects, Interview, Kruskal-Wallis)

Structural Performance of Concrete Blast Wall Barriers in Resisting Surface Explosions

By: Ashraf Gamal Ahmed Ahmed Nayel – M. Sc. – 2018

***Supervisor(s):* Dr. Adel Akl, Dr. Ehab Hassan Ali**

(Blast wall barriers, explosions, high-strain rate, numerical modeling, non-linear analysis, Explicit dynamic analysis)

2017

Behavior of Axially Loaded High Strength Reinforced concrete Short columns Exposed to fire

By: Mohamed Ahmed Saad El Mehallawy – M. Sc. – 2017

Supervisor(s) : Dr. Akram Torky, Dr. Naser El Shafie

(Axially loaded columns, High strength reinforced concrete, Short columns, Columns exposed to fire)

Simplified Computation of Time Dependent Effects of Segmental Prestressed Concrete Bridges

By : Magdy Ragheb Rashed Mikhail – M. Sc. – 2017

Supervisor(s) : Dr. Atef Sami Gindy, Dr. Sami Naguib Mikhail

(Segmental prestressed concrete bridge, Time dependent effects, Sequence of construction, Objective optimization technique)

Comparative Study Between Stability Indices for Concrete Moment Resisting Frames in Different Codes

By : Mahmoud A. Hassan Mahmoud – M. Sc. – 2017

Supervisor(s) : Dr. Ashraf Gamal Eldin Osman

(Stability; Second order; Buckling; P-Delta)

Simplified Computation of Time Dependent Effects of Segmental Prestressed Concrete Bridges

By : Mohammed Hammadi Abd El-Rahman – M. Sc. – 2017

Supervisor(s) : Dr. Akram M. Torkey, Dr. Rasha T.S. Mabrouk

(Wide-Shallob Beams, Minimum shear reinforcement, Steel fiber, Polypropylene fiber, Glass fiber)

Flexural Behavior of Reinforced Concrete Inverted Beams Strengthened Using Fiber Reinforced Polymers and Steel Plates

By: Abdelrahman Medhat Kamal Abdallah – M. Sc. – 2017

Supervisor(s) : Dr. Hatem Mostafa, Dr. Ezz El-Din Kamal Mohamed Ali

(Flexural behavior, Reinforced concrete, Inverted beams, Strengthening by fiber reinforced polymers, Strengthening by steel plates)

Assessing Seismic Performance of Mid-Rise Buildings Using Fragility Curve Sections

By: Ahmed Mohamed Ali Mohamed Ali Naiel – M. Sc. – 2017

Supervisor: Dr. Adel Akl , Dr. Nayer El-Esnawy

(Time history analysis, Reinforced concrete structures, Earthquake resistant structure, fragility)

Effect of Pozzolanic Materials on Flexural Behavior of Reinforced Concrete Beams

By: Mohamed Ashraf Saleh Abd El Mageed – M. Sc. – 2017

Supervisor(s): Dr. Hany Ahmed Abdallah, Dr. Islam Mohamed Rashad

(Flexural behavior, Compression, Metakolin and nano metakolin, Toughness, Long term Loading)

Influence of Nano Silica and Nano Clay on Mechanical Properties and Durability of Concrete.

By: Mustafa Ezzat Elbiyally – M. Sc. – 2017

Supervisor(s): Dr. Mashhour Ghoneim, Dr. Ahmed Mohamed Atta

(Flexural strengthening, External pre-stressing, Pre-Stressing level, Tendons length, Partially continuous beams)

Punching and Dynamic Properties of Slab Column Connection in Precast Concrete Structures.

By: Ahmed Abdellah Nasr Ahmed – M. Sc. – 2017

Supervisor(s): Dr. Nabil Abd El-Badei Yehia, Dr. Yehia M. Abd-Elmegeed Hussein
(Punching load capacity; Precast concrete; Slab column connections; Flat slab; Dynamic properties)

Strengthening of RC Flat Slabs with Openings Using CFRP Sheets

By: Mohamed Salah Taha Hafez – M. Sc. – 2017

Supervisor(s): Dr. Moustafa EL-Kafrawy, Dr. Saied Ali Mohamed Taher
(Punching shear, Flat slabs, CFRP sheets)

Novel Technique for Utilization of Steel Slag for Production of Cementless All Waste Geopolymer Concrete

By: Ramez Gamal Shenouda Bekhet – M. Sc. – 2017

Supervisor(s): Dr. Mohamed Ismail Serag, Dr. Muhammad Samy El-Feky
(Steel slag aggregate, Water cooled steel slag, Air cooled steel slag, Alkali activated slag, Geopolymer concrete)

Evaluation of Response Modification Factor for Reinforced Concrete Structures with Dual Lateral Loads Resisting System Using Applied Element Method

By: Ahmed Mohammed El-Hussein Mohammed – M. Sc. – 2017

Supervisor(s): Dr. Hamed M. Salem
(Response modification factor, Ductility, Over-strength, Redundancy, AEM)

Effect of Modeling Methods on the Structural Behavior of Cable-Stayed Bridges under Static Loads

By: Khaled Gomaa Mofadl Abdel-Maged – M. Sc. – 2017

Supervisor(s): Dr. Walid Attiya, Dr. Hatem Mostafa, Dr. Ehab Khalil
(Cable-stayed bridges; Modeling; Finite element)

Behavior of Lightweight Reinforced Concrete Beams with openings in Shear Zone

By: Mohamed Ibrahim Mohamed Ahmed – M. Sc. – 2017

Supervisor(s): Dr. Hany Ahmed Abdalla, Dr. Nasser Fekri Elshafey
(Lightweight concrete; Simply-supported beams; Openings; Shear zone; Stiffness)

Numerical Simulation of Concrete Gravity Dam under Seismic Loading

By: Mohamed Ashraf Mohamed Abdel Azeed Elsayad – Ph.D. – 2017

Supervisor(s): Dr. Walid Attiya, Dr. Adel M. Belal
(Concrete gravity dams; Earthquake analysis; Dam-water-foundation interaction; Cracks propagation; Structural optimization)

Numerical Investigation on Flexural Strength of Cantilevered Circular Steel Hollow Sections

By: Abdel-Rahman Mostafa Mohamed El-Mahdy Abdel-Ghaffar – M. Sc. – 2017

Supervisor(s): Dr. Sherif Mourad · Dr. Sherif Safar
(Circular steel hollow sections, Finite element analysis, Diameter –to thickness ratio, Nonlinear analysis, Initial geometrical imperfection)

Production of Green Compressed Stabilized Earth Blocks Using Local Industrial and Agricultural Wastes

By: Yasser Abd El Azeem Abd El Basset – M. Sc. – 2017

Supervisor(s): Dr. Mashhour Ghoneim Ahmed, Dr. Hatem Abd El Aal Selim

(Seismic design, Reinforced concrete framed structures, The Egyptian code for design and construction of concrete structures, Ductility)

Influence of Nano Silica and Nano Clay on Mechanical Properties and Durability of Concrete

By: Khadiga Mahmoud Abd El Mageed Mekky – M. Sc. – 2017

Supervisor(s): Dr. Mashhour Ghoniem Ahmed, Dr. Kamal Gad Sharobim

(Nano-silica, Nano-clay, Mechanical properties, Durability, Rapid chloride penetration)

Assessment of Using Exterior Brick Walls for Existing Reinforced Concrete Structures Subject to Blast Load

By: Ahmed Amin Bayoumey Mohamed – Ph. D. – 2017

Supervisor: Dr. Walid Attia

(Blast load, Brick, Existing structures, Exterior Walls)

Structural Behavior of Self-Cured Lightweight Concrete Columns Before and After Exposure to Elevated Temperature

By: Mohamed Ahmed Hassan Ahmed – M. Sc. – 2017

Supervisors: Dr. Mohamed Mohsen El-Attar, Dr. Ahmed Ragab, Dr. Dina Mahmoud Sadek

(Lightweight Concrete – Concrete Columns – Elevated Temperature)

Seismic Response Modification Factor For Medium Height RC Buildings with Dual Lateral Load Structural Resisting System

By: Doaa Mohamed El-Shafei Ahmed Darwish – M. Sc. – 2017

Supervisors: Dr. Walid Attia, Dr. Maha Moddather Hassan

(Response modification factor, Ductility factor, Overstrength factor, non-linear static analysis, Pushover analysis)

Investigating the Performance of Relational Contracts Using Social Network Analysis

By: Mahmoud Mohamed Abd El-Moneim El- Sayed – M. Sc. – 2017

Supervisors: Dr. Omar H. Al-Anwar, Dr. Islam H. El-Adaway

(Relational Contracts, Social Network Analysis, Integrated Project Delivery, Partnering)

Assessment of Using Exterior Brick Walls for Existing Reinforced Concrete Structures Subject to Blast Loads

By: Ahmed Amin Bayoumy Mohamed – Ph. D. – 2017

Supervisor(s): Dr. Akram Torky, Dr. Ehab Badr El-Din Khalil

(Blast loads, Brick walls, Exterior walls)

Structural Behavior of Self-Cured Lightweight Concrete Columns Before and After Exposure to Elevated Temperature

By: Yara Maged Mahmoud Soliman – M. Sc. – 2017

Supervisor(s): Dr. Mohamed Mohsen El-Attar, Dr. Ahmed Ragab, Dr. Dina Sadek

(Lightweight concrete, Concrete columns, Elevated temperature)

Investigating the Performance of Relational Contracts Using Social Network Analysis

By: Mahmoud Mohamed Abd El- Moneim El-Sayed – M. Sc. – 2017

Supervisor(s): Dr. Omar Al-Anwar, Dr. Islam El-Adawy

(Relational contracts, Social network analysis, Integrated project delivery, Partnering)

Seismic Response Modification Factor for Medium Height RC Buildings with Dual Lateral Load Structural Resisting System

By: Doaa Mohamed El-Shafei Ahmed Darwish – M. Sc. – 2017

Supervisor(s): Dr. Walid Attiya, Dr. Maha Moddather

(Seismic response, Modification factor, Dual lateral load, Medium height RC buildings)

Assessment of the Effect of Some Nano-materials on Concrete Durability in Lab and Field

By: Youssef Ahmed Mosleh Saleh – Ph. D. – 2017

Supervisor(s): Dr. Hossam Abd El-Ghafour Hodhod , Dr. El-Saaid Ibrahim Zaki-Eldeen

(Concrete durability, Nanosilica , Nanoclay ,Hybrid nanomaterials , Blended shotcrete, Pozzolanic activity)

Progressive Collapse Assessment for Multi-Story Steel Structures Under Seismic Loading

By: Yara Maged Mahmoud Soliman – M. Sc. – 2017

Supervisor(s): Dr. Sherif Ahmed Mourad, Dr. Hesham Sobhy, Dr. Maha Moddather

(Progressive collapse, Moment Resisting Frames, Braced Frames, Column Removal, Seismic Loads)

Iso-geometric Boundary Integral Formulation for Shear-Deformable Plate Bending Problems

By: Ahmed Khaled Aly Abdelmoety – M. Sc. – 2017

Supervisor(s): Dr. Youssef F. Rashed

(Boundary Element Method, NURBS, Shear Deformable Plates , Isogeometric Analysis)

Behavior of Axially Loaded Cold-Formed Steel Walls Lined with Ferrocement Boards

By: Mohamed Gamal Abo El Kasem Salama – M. Sc. – 2017

Supervisor(s): Dr. Metwally Hassan Abu-Hamd

(Cold-formed steel wall, FerroCement board, Axial loading capacity, Finite element modelling)

Flexural Behavior of Ferro-Cement Slabs Supported on Cold Formed Steel Joists

By: Yassein Salah El Dien Mohammed Sief EL Dien Yassien – M. Sc. – 2017

Supervisor(s): Dr. Metwally Hassan Abu-Hamd

(Ferro-cement slabs, Cold formed steel, Flexure)

Theoretical Study of Openings' Effect on the Behavior of Beams with Variable Concrete Strength

By: Ahmed El Ghool Hassan Osman – M. Sc. – 2017

Supervisor(s): Dr. Akram Torkey, Dr. Nasser Elshafey

(Beams with Openings – Openings at shear zone – High Strength Concrete)

Effect of Nonlinear Behavior of RC Coupling Beams on The Seismic Response of Coupled Shear Walls System

By: Omar Magdy Mohamed Badr Nofal – M. Sc. – 2017

Supervisor(s): Dr. Adel Y. Akl, Dr. Mostafa El Sayed

(Shearwalls, Coupling beams, Pushover, Nonlinear analysis, Finite element analysis)

Evaluation of Alternate Techniques for Calculation of Seismic Separation Distance in Comparison to the Egyptian Code Considering the Effect of Story Heights

By: Ali Mohamed Abdel Moneim Ali Kotb – M. Sc. – 2017

Supervisor(s): Dr. Murad Bakhoun, Dr. Walid Atiya

(Reinforced concrete structures, Seismic loads, Pounding prevention, Separation distance, non-linear analysis)

Modeling of Shear Behavior of Prestressed Concrete Segmental Beam Joints

By: Mahmoud Abdel Aal Mabrouk Ibrahim – M. Sc. – 2017

Supervisor(s): Dr. Murad Bakhoun, Dr. Hatem Mostafa

(Segmental beam, Precast prestressed concrete, Shear keyed, Keyed joints, Shear strength)

Seismic Behavior and Repair of Steel Fiber Reinforced Concrete Bridge Columns

By: Abdel Rahman Mohamed Naguib Abdel Rahman Ibrahim – Ph. D. – 2017

Supervisor(s): Dr. Nayer Ahmed El-Esnawy, Dr. Ahmed Mahmoud Saleh, Dr. Walid Attiya

(Steel fibers, Hysteretic behavior, Bridge columns, Ductility, Quasi-static tests, Seismic demands, Repair, Carbon fibers)

Progressive Collapse Analysis of Precast Concrete Connections Using the Applied Element Method

By: Mariam Mohamed Ehab Ahmed Ibrahim – Ph. D. – 2017

Supervisor(s): Dr. Hamed Salem Hadhoud

(Progressive collapse, Precast concrete connections, Applied element method)

Optimization of Durability by Tri Blend Concrete Mixes Containing Flyash, Silica Fume and Ground Granulated Blast Furnace Slag Powder (GGBS)

By: Omar Hussein Abd EL Ghany Hussein Omar – M. Sc. – 2017

Supervisor(s): Dr. Osama Abdel Ghafour Hodhod

(Durability of concrete, Permeability reduce, No Penetration, GGBS Replacement)

Evaluation of Relative Efficiencies of Egyptian Public Business Sector Construction Companies Using Data Envelopment Analysis

By : Mahmoud Ahmed Zaki Mahmoud Helaly – M. Sc. – 2017

Supervisor(s): Dr. Moheeb Ibrahim El-Said

(Construction Management, Efficiency Evaluation, Construction Companies, Data Envelopment Analysis, Window Analysis)

Numerical Investigation on Shear Strength and Design Requirements of Tapered End Web Panels

By: Omar Ashraf Omar Abdel-kawy Sediek – M. Sc. – 2017

Supervisor(s): Dr. Sherif Saleh Safar, Dr. Maha Modather Hassan

(Tapered Plate girder, Critical buckling shear stress, Ultimate shear strength, Tension Field)

3D Nonlinear Analysis of RC Beams Shear-Strengthened with FRP Sheets

By: Abdel Rahman Gamal Mohamed Mabrouk – M. Sc. – 2017

Supervisor(s): Dr. Adel Yehia Akl, Dr. Osman Ramadan, Dr. Ebtisam Abdel Aziz Yehia
(RC beams, shear-strengthened, FRP sheets, finite element, ABAQUS)

Behavior of Normal and High Strength Concrete Beams Under Flexure and Shear

By: Ehab Nabil Saad Balat – M. Sc. - 2017

Supervisor(s): Dr. Mohamed El Said Eisa, Dr. Naser Fikry El Shafey
(Normal and high strength concrete beams, shear span to depth ratio, web reinforcement ratio, longitudinal reinforcement ratio, Non-linear static analysis, Finite elements, ANSYS (14 software))

Framework for Evaluating Administrative Buildings Evacuation Using Agent-Based Simulation and Multi-Criteria Decision Making

By: Basma Sayed Mostafa Mohamed – M. Sc. – 2017

Supervisor(s): Prof. Mohamed Mahdy Marzouk
(Building Evacuation, Building Information Modeling, Agent-Based Simulation, Multi-Criteria Decision-Making)

Numerical assessment of multistorey reinforced Concrete framed structures subjected to blast loading using the Applied Element Method

By: Mohamed Ramadan Ibrahim Hafez Albady – M. Sc. – 2017

Supervisor(s): Dr. Hamed Mohamed Hamed Hadhoud, Dr. Huda Mohamed Helmy Hussein
(Blast load, Progressive collapse, Strengthening)

Investigation Of Dynamic Impact Factor For Steel Railway Bridges By Field Measurements

By: Mohamed Gamal Sayed Elbaroty – M. Sc. – 2017

Supervisor(s): Prof. Dr. Sherif A Murad, Prof. Dr. Mohamed A Zaki
(Dynamic impact factor, Railway bridges, Steel truss bridge, Field load tests, Railway traffic speed)

Numerical Investigation Of Punching Shear Strength Of Slab-Column Connection

By: Shereen Mahmoud Mohamed Ibrahim moawaad – M. Sc. – 2017

Supervisor(s): Prof. Dr. Prof. Dr. Hamed Mohamed Mahmoud Hadhoud
(Dynamic impact factor, Railway bridges, Steel truss bridge, Field load tests, Railway traffic speed)

The Efficiency of The Construction Insurance Policies in Managing Construction Risks in Egypt

By: Ahmed Hesham Ahmed Fathy El Kady – M. Sc. – 2017

Supervisor(s): Dr. Moheeb E. Ibrahim, Dr. Mohamed A. Bakry
(Applied element method (AEM), Extreme loading of structure (ELS))

Condition Assessment of Public Schools Facilities Using AHP and Fuzzy Logic

By: Ehab Samir Awad Alla Erian –Ph. D. –2017

Supervisor: Professor Dr. Mohamed Mahdy Marzouk
(Public Schools, Maintenance and Rehabilitation, AHP, Fuzzy Logic)

Efficient BEM formulation for Analysis of Plates on Tensionless Half Space

By: Marina Reda Lotfy – M.Sc. – 2017

Supervisor(s): Dr. Youssef Fawzy Rashed
(Boundary element method, tensionless foundations, nonlinear analysis, Elastic half space)

Evaluating the Safety Level of Prestressed Concrete Bridge Girders Designed Using Different International Codes

By: Ehab Mamdouh Hanna Riad – M.Sc. – 2017

Supervisor(s): Dr. Walid Abdel Latif Atiya, Dr. Gamal Helmy Hanna
(CSI Bridge, Eurocode, AASHTO LRFD code, Egyptian code, Live load, Prestressed bridges)

An Expert System for Measuring and Enhancing the Degree of Quality in the Construction Project

By: Ahmed Mohamed Abdel-Moneam Hekal – M.Sc. – 2017

Supervisor(s): Dr. Moheeb El-Said Ibrahim, Dr. Atef Abdel-Moghny Ibrahim
(Expert System, Quality management, Construction management, Cost of quality, ISO 9000)

Behavior of Reinforced Concrete Wide Beams-Column Joints Under Cyclic Load

By: Alaa Farouk Omar El-Kashif – Ph. D. – 2017

Supervisor(s): Dr. Ahmed Mohamed Farahat, Dr. Hatem Hamdy Ghith, Dr. Hamed Hadhoud
(Wide beam-column joints, earthquake resistant structure, seismic design, seismic behavior, Applied element method)

Performance Assessment Model for Existing Buildings Using System Dynamics Technique

By: Norhan Atiya Hamed Abdel Rahman Selim – M.Sc. – 2017

Supervisor(s): Dr. Mahdy Marzouk
(System dynamics, Building performance, Performance assessment model)

Compression Strength of Cold-Formed Steel Battened Columns with “C” Stitches

By: Rani Mamdouh Hasan Hassan – M.Sc. – 2017

Supervisor(s): Dr. Sherif Safar
(Battened Columns, C stitches, Compression strength, Cold-formed steel columns)

Comparative Seismic Study for High Rise Steel Buildings in Zone (C) Between Special Concentrically Braced Frames (SCBF) and the Common Braced Frames Not Specifically Detailed for Seismic Resistance

By: Mahmoud Samir Abdel-Halim Ahmed – M.Sc. – 2017

Supervisor(s): Dr. Maheeb Abdel-Ghaffar, Dr. Mohamed Danish Arafa
(Seismic behavior, High rise steel buildings, Braced frames, Zone C, Special concentric bracing)

Behavior of Tension Lap Splices Confined by Transverse Reinforcement on Different Types of Reinforced Concrete Beams

By: Ahmed Monir Fathallah Abdel-Hafez – M.Sc. – 2017

Supervisor(s): Dr. Akram Torky, Dr. Rasha Snousy
(Tension lap splices, Reinforced concrete beams, Transverse reinforcement)

A Developed FEM-BEM Practical Technique to Consider SSI in the Lateral Analysis for Multistory Buildings

By: Abdel-Rahman Mohamed Ibrahim Aly El-Melegey – M.Sc. – 2017

Supervisor(s): Dr. Youssef Fawzy Rashed
(FEM-BEM technique, Lateral analysis, Multistory buildings)

An Experimental and Analytical Study on the Behavior of Steel Fiber Reinforced Concrete Deep Beams with Openings

By: Ahmed Khalaf Youssef Tewfik – M.Sc. – 2017

Supervisor(s): Dr. Akram Torky, Dr. Rasha Tharwat Snousy

(Deep Beams with openings, Behavior of Reinforced concrete beams, Fiber reinforcement, Deep Beams with Openings)

The Obligations of the Client and the Consultant in Local and International Engineering Consultancy Contracts – A Comparative Study

By: Khaled Mohamed Youssef Mohamed – Ph. D. – 2017

Supervisor(s): Dr. Nabil Abdel-Badei Yehia, Dr. Omar Hosam El-Din El-Anwar, Dr. Tarek Husain Hamed

(Client obligations, Consultant obligations, Engineering consultancy contracts, local and international consultancy contracts)

The Effect of Polymers and Seawater on the Performance of Recycled Aggregate Concrete

By: Aaed Ahmed Mahmoud Zohd – Ph. D. – 2017

Supervisor(s): Dr. Ahmed Ragab, Dr. Mohsen El-Attar, Dr. Mohamed Zeyara

(Polymers, Seawater, Recycled aggregate concrete)

Finite Element Analysis of R.C. Beam Column Connections Exposed To Fire and Strengthened by CFRP Strips"

By: Mohamed Abdel Menem Mohamed Zakariya – M.Sc. – 2017

Supervisor(s): Dr. Hany Ahmed Abdallah, Dr. Islam Mohamed El-Habbal

(Finite element, Beam column connection, Fire, CFRP strips)

Effect of Reinforcement on Punching Behavior of Flat Slab

By: Ahmed Mohamed El-Said Said Eisa – M.Sc. – 2017

Supervisor(s): Dr. Mohamed Talaat Mostafa, Dr. Mohamed Rabei Husain, Dr. Hatem Hamdy Gheith

(Flat slab, Punching, Reinforcement)

Non-linear Analysis of Single Coupled Shear Walls Supported on Columns

By: Amir Abdel Fadeel Ismaeil Ghanem – M.Sc. – 2017

Supervisor(s): Dr. Mohamed El-Said Eisa, Dr. Naser Fikry El-Shafei, Dr. Heba El-Said

(Shear walls, Non-linear analysis, Coupled shear walls)

Investigating the Effect of Bracing and Number of Bays on the Value of Response Modification Factor

By: Abdel Rahman Sobhy Mohamed El-Tanashy – M.Sc. – 2017

Supervisor(s): Dr. Waleed Abdel Latif Atiya, Dr. Emad Abdel-Rahman Mohamed Marei

(Bracing, Bays, Response modification factor, seismic response)

Applied Quality Function Deployment in Residential Construction Projects

By: Noran Ashraf Abdel-Halim Abdel-Aziz – M.Sc. – 2017

Supervisor(s): Dr. Omar Hosam El-Din Al-Anwar

(Quality function deployment, Residential Buildings, Construction projects)

Cyclic Behavior of Base Connection for C-Bent Pier Subjected to Combined Flexural-Torsional Loading

By: Mohamed Abdel-Aziz Mohamed Abdel-Aziz – Ph.D. – 2017

***Supervisor(s):* Dr. El-Sayed Bahaa El-Din Mashaly, Dr. Sherif Saleh Safar**

(Cyclic behavior, C-bent pier, Flexure/Torsion combined loading, Base connection, Bridges)

2016

Effect of Interface Position with Different Concrete Compressive Strength and Shear Connector Shapes on the Behavior of One-Way Composite Pre-Slabs

By: Ahmed Adel Aly Afify – Ph.D. – 2016

Supervisor(s): Dr. Dr. Mohamed El-Said Eisa, Dr. Mohamed Talaat Mostafa, Dr. Mohamed Rabei Husain, Dr. Sherif Ahmed Mostafa
(Concrete, Compressive strength, Shear connectors, Interface position, Pre-slabs, Composite slabs, Behavior of pre-slabs, One-way pre-slabs)

Effect of Stairs on Seismic Performance of Reinforced Concrete Buildings

By: Reem Nady Abou Serei El-Nady – M.Sc. – 2016

Supervisor(s): Dr. Mohamed Naeem Abdel-Mooty
(Stairs, Seismic performance, Reinforced concrete)

Performance of R.C. Columns in Resisting Blast Loads

By: Ahmed Ismaeil Ahmed Gouda – M.Sc. – 2016

Supervisor(s): Dr. Mohamed Naeem Abdel-Mooty, Dr. Mostafa Mohamed Abdel-Wahab
(Columns, Reinforced concrete, Blast loads)

Seismic performance of staircases in the 3D analysis of buildings

By: Omniya Husain Abou El-Wafa Ahmed – M.Sc. – 2016

Supervisor(s): Dr. Ashraf Adel Shawky
(3D analysis, staircases, seismic performance, Reinforced concrete buildings)

Computational Model of Ultimate Capacity and Behavior of Reinforced Concrete Beams With Multiple Openings

By: Amr Naser Saad Hilal – M.Sc. – 2016

Supervisor(s): Dr. Mohamed Talaat Mostafa
(Ultimate capacity, Behavior, Reinforced concrete beams, Multiple openings)

Behavior of RC Flat Slabs With Horizontal RFT and Vertical Shear Stirrups in Punching

By: Aly Ahmed Mostafa Mohamed Hegab – M.Sc. – 2016

Supervisor(s): Dr. Magdy Kassem, Dr. Rasha Snousy, Dr. Osman Abdel-Rahman Meet-Kees
(Flat slab, Punching shear, RC slabs, Horizontal reinforcement, stirrups, Vertical shear)

Effect of Elevated Temperature on Physical and Mechanical Properties of Expanded Polystyrene Light Weight Concrete

By: Saher Salama Mohamed Salama – M.Sc. – 2016

Supervisor(s): Dr. Osama Abdel-Ghafour Hodhod
(Elevated temperature, expanded polystyrene, lightweight concrete, Physical properties, mechanical properties)

Effect of Inclination of Cables Plane on the Stability of Long Span Cable-Stayed Bridges

By: Sara Said Momdough Abdel-Karim – M.Sc. – 2016

Supervisor(s): Dr. Waleed Abdel-Latif Atiya
(Cable-stayed, Bridges, Cable plane inclination, Long span, Stability)

Optimizing Construction and Demolition Waste Management Strategies for Sustainable Environment

By: Nihal Ahmed Tarek Mohamed Abdel-Kader – M.Sc. – 2016

Supervisor(s): Dr. Mohamed Mahdy Marzouk, Dr. Manal Sayed Abdel-Hamid
(Waste management, sustainable environment, Optimizing construction waste, Demolition waste, Strategies)

Modeling Total Quality Management and Learning Organization in Construction Design Organizations Using System Dynamics

By: Dalia Abdel-Aal Ibrahim Abdel-Rahman – M.Sc. – 2016

Supervisor(s): Dr. Mohamed Mahdy Marzouk, Dr. Mohamed Abdel-Latif Bakry

(Modeling, TQM, Learning organization, System dynamics, Construction, Design organizations)

Shear Behavior of Self - Compacting High Strength Concrete Inverted T-Beams

By: Ahmed Mohamed Mamdouh Mohamed Youssef – M.Sc. – 2016

Supervisor(s): Dr. Hatem Mostafa Mohamed

(Shear behavior, High strength, inverted T-beams, Self-compacting concrete)

Shear Behavior of Self Compacting High Strength Concrete Beams with Openings

By: Ibram Ata Ibrahim Fanous – M.Sc. – 2016

Supervisor(s): Dr. Hatem Mostafa Mohamed

(Shear behavior, High strength, Concrete beams, Self-compacting concrete, Beams with openings)

Life Cycle Assessment of Cement Industry in Egypt – Environmental Impact Assessment

By: Abdel-Rahman Mohamed Ahmed Aly – M.Sc. – 2016

Supervisor(s): Dr. Maheeb El-Said Ibrahim, Dr. Hisham Maged Osman

(Cement industry, life cycle, environmental impact)

Shear Behavior of Shallow Wide Beams Strengthened With Externally Bonded CFRP Strips

By: Ahmed Abou El-Ela Mostafa Mohamed – M.Sc. – 2016

Supervisor(s): Dr. Nayer Ahmed El-Esnawy, Dr. Hatem Mostafa Mohamed, Dr. Hatem Hamdy Gheith

(Shallow wide beams, Shear behavior, CFRP strips, Strengthened beams, External bonded strips)

Local and Post Local Buckling of Hollow and Concrete Filled Box Steel Tubes

By: Omar Saber Risk Hasan – M.Sc. – 2016

Supervisor(s): Dr. Ahmed Foad Sabry, Dr. Kamal Ghamry Metwally

(Local buckling, Post local buckling, Hollow box steel tubes, Concrete filled steel tubes)

Numerical Simulation of Shield Tunneling with Special Application on Tunnels Crossing in Cairo

By: Mohamed Abdel-Sadek Abdel-Aziz El-Shorbagy – Ph. D. – 2016

Supervisor(s): Dr. Adel Yehia Akl, Dr. Kamal Ghamry Metwally

(Numerical simulation, Shield tunneling, Tunnels crossing in Cairo)

Comparative Study of Prestress Losses According to International Codes

By: Mahmoud Mohamed Madany Mohamed – M.Sc. – 2016

Supervisor(s): Dr. Waleed Abdel-Latif Atiya

(Prestress losses, International codes, Prestressed concrete)

Numerical Study on the Behavior of CFRP-Strengthened Cold-Formed Steel Beams

By: Esam Gamal-Eldin Sliman – M.Sc. – 2016

Supervisor(s): Dr. Ahmed Farouk Hasan, Dr. Mohamed Hasanein Sorour

(Numerical Analysis, Cold-formed steel beams, CFRP Strengthening)

Comparitive Study between Empirical Equations of 201 Critical Wind Speed for Cable-Stayed Bridges

By: Noran Mamdouh Tammam Nagdy – M.Sc. – 2016

Supervisor(s): Dr. Waleed Abdel-Latif Atiya

(Cable-stayed bridges, Critical wind speed, Empirical equations)

Elastic Buckling Of Simply Supported Stiffened Steel Plates Opening Under Uniaxial Compression

By: Sara Ibrahim Mahmoud Ibrahim – M.Sc. – 2016

Supervisor(s): Dr. Ahmed Farouk Hasan, Dr. Mohamed Hasanein Sorour, Dr. Maha Moddather

(Elastic buckling, Steel plates, stiffened opening, uniaxial compression)

A Consistent BEM Based Modeling of Tall Buildings

By: Ahmed Osama Said Said Abdel-Hady – M.Sc. – 2016

Supervisor(s): Dr. Wael Mohamed Khalil El-Degwy, Dr. Youssef Fawzy Rashed

(BEM, Modeling, Tall buildings)

Experimental Study of the Mechanical Behaviour of Grouted Splice Sleeve Connections for Precast Concrete Construction under Axial Tensile Load

By: Bilal Aly Abdel-Hafiz Abdel-Rahman – M.Sc. – 2016

Supervisor(s): Dr. Hossam Abdel-Ghafour Hodhod, Dr. Hatem Hasan Aly Ibrahim

(Mechanical behavior, Grouted splice sleeve connections, precast concrete, Axial tensile loads)

Flutter Stability and Aerodynamic Optimization of Cable-Stayed Bridge Deck Using Numerical Simulation

By: Saad Abou El-Ela Saad Yehia – Ph. D. – 2016

Supervisor(s): Dr. Waleed Abdel-Latif Atiya

(Flutter stability, Aerodynamic optimization, Cable-stayed bridges, Numerical simulation)

Effect of Confinement with Lateral Reinforcement on Reinforced Concrete Columns

By: Mohamed Abdel-Zaher Mohamed Shanan – Ph. D. – 2016

Supervisor(s): Dr. Ahmed Ragae Anis, Dr. Ashraf Hasan El-Zanaty, Dr. Kamal Ghamry Metwally

(Reinforced concrete columns, Confinement with Lateral Reinforcement)

Performance of High Rise Buildings with Transfer Floor under Seismic Loads

By: Yaser Mohamed Abdel-Baset Abdallah – Ph. D. – 2016

Supervisor(s): Dr. Sherif Murad, Dr. Ezz El-Din Yazeed

(High rise buildings, seismic loads, Transfer floors, performance of high rise buildings)

Behavior of High Strength Reinforced Concrete Columns Under Centric and Eccentric loads

By: Heba Mostafa Mahmoud Mohamed – M. Sc. – 2016

Supervisor(s): Dr. Haneer Mohamed El-Hashmy, Dr. Naser Fikry El-Shafei

(High strength concrete, Reinforced concrete columns, Centric loads, Eccentric loads)

Human Comfort Study of Medium Rise Reinforced Concrete Buildings under Wind Excitations

By: Sherihan Harby Aly El-Sherif – M. Sc. – 2016

Supervisor(s): Dr. Sherif Murad, Dr. Hatem Mostafa, Dr. Maha Moddather

(Human comfort, Medium rise buildings, Wind excitations, Reinforced concrete buildings)

Nonlinear Behavior of Reinforced Concrete Circular Tunnels Under seismic Loads in clayey soil

By: Ashraf Khamis Abdel Fattah Hammad – M. Sc. – 2016

Supervisor(s): Dr. Adel Yehia Akl, Dr. Ahmed Fathy Zidan

(Nonlinear behavior, Clayey soil, Reinforced concrete tunnels, Circular tunnels, Seismic loads)

A Comparative Study of Egyptian And French Civil Laws: Building and Construction Provisions

By: Haythem Abdel Hakim Abdel Fattah Amer – M. Sc. – 2016

Supervisor(s): Dr. Mohamed Mahdy Marzouk, Dr. Ahmed Mohamed El-Dakhmisy

(Comparative study, Civil laws, Building and construction provisions, Egyptian civil law, French civil law)

Comparison between Boundary Element and Finite Element Approaches in Structural Analysis of Different Types of Structural Slabs

By: Kathrene Bahgat Misak Estoros – M. Sc. – 2016

Supervisor(s): Dr. Murad Mishel Bakhoun, Dr. Youssef Fawzy Rashed

(Boundary element, Finite element, Structural analysis, Structural slabs)

Response of Structures to Small and Medium Blast Load

By: Ahmed Mahmoud Khalil Ibrahim – M. Sc. – 2016

Supervisor(s): Dr. Osman Mohamed Ramadan

(Response of structures, Blast loads)

Compatibility of Different Types of Concrete Admixtures Used For Retempering of Fiber Reinforced Concrete

By: Aya Abdel Monem Ezz El-Rigal Mohamed – M. Sc. – 2016

Supervisor(s): Dr. Hamed Salem Hadhoud, Dr. Ghada Diaa Abdel Hamid

(Retempering, Fiber reinforced concrete, Concrete admixtures)

Effect of Overload Vehicles on Behavior of Composite Steel Girder Bridges

By: Kamel Tamer Kamel Hawwash – M. Sc. – 2016

Supervisor(s): Dr. Ahmed Hasan Amer, Dr. Waleed Abdel Latif Atiya

(Overload vehicles, Girder bridges, Composite steel girders)

Capacity Analysis of Steel Transmission Towers

By: Sara Nagui Salah El-Din Al- Ayoubi – M. Sc. – 2016

Supervisor(s): Dr. Sherif Murad, Dr. Hazem Mostafa Ramadan

(Capacity analysis, Transmission towers, Steel towers)

Repair of Flat Slab-Column Connections Using Slurry Infiltrated Fiber Concrete (SIFCON)

By: Mamdouh Ahmed Mostafa Ahmed – M. Sc. – 2016

Supervisor(s): Dr. Hamed Salem Hadhoud, Dr. Wahba Wahba El-Tahhan

(Repair of reinforced concrete, Flat slab-column connections, Slurry infiltrated fibr concrete, SIFCON)

Developing New Approach for Measuring Construction Project Performance

By: Khaled Abou El-Ata Mohamed Abou El-Ata – M. Sc. – 2016

Supervisor(s): Dr. Moheib El-Said, Dr. Ahmed Saad El-Din El-Deeb

(Construction projects, Performance measuring approach)

Punching Stress Behavior of Slab-Column Connections by using Hybrid Fibered Reinforced Concrete under the Effect of Elevated Temperature

By: Riham Hasan Mohamed Ahmed – Ph. D. – 2016

Supervisor(s): Dr. Ahmed Farahat, Dr. Ghada Daa Abdel-Hamid

(Punching stress, Slab-column connections, Hybrid fibered reinforced concrete, Elevated temperature)

Evaluating Building Systems Energy Performance Using BIM and Superiority and Inferiority Ranking

By: Ibrahim Gamal Abdel-Baset Mohamed– M. Sc. – 2016

Supervisor(s): Dr. Mohamed Mahdy Marzouk

(Building systems, Energy performance evaluation, BIM, Superiority ranking, inferiority ranking)

Wind Loads Assessment for steel Lattice Towers with different Codes

By: Mohamed Said Mohamed Ismaeil – M. Sc. – 2016

Supervisor(s):Dr. Waleed Atiya

(Wind loads, Steel lattice towers, Codes)

Shear Behavior of Lightweight Fiber Reinforced Concrete Beams

By: Aly Mohamed Magdy Hasan – M. Sc. – 2016

Supervisor(s):Dr. Hany Abdallah, Dr. Ghada Daa Abdel-Hamid

(Shear behavior, Fiber reinforcement, Lightweight concrete beams)

Numerical Investigation on Buckling Strength of Columns with Semi- Elliptical Hollow Cross – Section

By: Basem Mohamed Dawoud Ibrahim – M. Sc. – 2016

Supervisor(s): Dr. Sherif Safar, Dr. Maha Moddather

(Numerical Investigation, Buckling Strength, Columns, Hollow semi-elliptical column cross sections)

Innovative Approaches to Handle Issues in Performance-Based Seismic Behaviour of Multistory RC Buildings

By: Amer Abdel-Wahab Hammady El-Naeimy – M. Sc. – 2016

Supervisor(s): Dr. Adel Yehia Akl

(Seismic behavior, Multistory RC buildings, Innovative approaches, Performance-based behavior)

Strategic planning for BIM implementation in Egypt

By: Nada Wael Arafat El-Mansy – M. Sc. – 2016

Supervisor(s): Dr. Mohamed Mahdy Marzouk

(Strategic planning, BIM implementation)

Risk Management of Deploying Mobile Telecom Sites (MTS) In Egypt

By: Mohamed Mostafa Eid Mareiy Aly – M. Sc. – 2016

Supervisor(s): Dr. Moheib El-Said Ibrahim, Dr. Hisham Maged Osman, Dr. Maged Ezzat Gorgy

(Risk management, Deploying MTS in Egypt)

An Optimized Artificial Neural Network to Estimate the Shear Strength of Fibrous and RC Concrete

By: Iman El-Nos Abdel-Azim Aly – M. Sc. – 2016

Supervisor(s): Dr. Osama A bdel-Ghafour Hodhod

(Optimized Artificial Neural Network, Shear strength estimation, Fibrous concrete, Reinforced concrete)

Reliability of Slender Reinforced Concrete Column

By: Ahmed Shaaban Abdel-Haye – M. Sc. – 2016

Supervisor(s): Dr. Metwally Ahmed Abdel-Aziz
(Reliability, Reinforced concrete, Slender columns)

An Extended Force Density Method for Form finding of Constrained Cable Nets

By: Ghada Mohamed Abou El-Nasr Khalil – Ph. D. – 2016

Supervisor(s): Dr. Sherif Murad
(Extended force density method, Constrained cable nets)

Behavior Evaluation of Prestressed Concrete Beam under Corrosion Exposure

By: Mohamed Sayed Mohamed Moawad – Ph. D. – 2016

Supervisor(s): Dr. Ashraf Hasan El-Zanaty, Dr. Hosam Zakariya El-Karmouty
(Prestressed concrete beams, Corrosion exposure)

Effect of Different Types of Cements and Admixtures on Properties of Self-Compacting Concrete

By: Iman Ibrahim Ahmed Zaki – M. Sc. – 2016

Supervisor(s): Dr. Hosam Abdel Ghafour Hodhod
(Types of cement, Admixtures, Self-compacting concrete)

Analysis and Design of Walls and Wall Protection Systems Subject to Blast using the Applied Element Method

By: Tarek Mohamed Mohamed El-Kadry Mohamed Osman – M. Sc. – 2016

Supervisor(s): Dr. Sherif Murad, Dr. Ahmed Amir Khalil
(Analysis, Design, Walls, Blast, Wall protection systems, Applied element method)

Shear Behavior of Steel Fiber Reinforced Concrete Wide Beams without Stirrups

By: Ahmed Said Mohamed Abdel Ghaffar – M. Sc. – 2016

Supervisor(s): Dr. Mostafa El-Kafrawy, Dr. Tamer Mahmoud El-Rakkeeb
(Shear behavior, Steel fiber reinforcement, Concrete wide beams, Beams without stirrups)

A Proposed Practical Method for Improving Seismic Response of Existing School Buildings in Egypt

By: Batoul Monir Wahba – Ph. D. – 2016

Supervisor(s): Dr. Mohamed Ezzat Sobeih, Dr. Adel Yehia Akl
(Seismic response, Existing school buildings, Egyptian school buildings)

Shear Behavior of Reinforced Concrete Short Sandwich Panel Walls under Static and Lateral Cyclic Loading

By: Fatma El-Zahraa Ibrahim Abdel Latif Rifaey – Ph. D. – 2016

Supervisor(s): Dr. Mohmoud Tharwat El-mehelmy, Dr. Tarek Mohamed Bahaa El-Din
(Shear behavior, Reinforced concrete, Static loads, Lateral loading, Cyclic loading, Short sandwich panel walls)

Shear Transfer across Concrete-Concrete Interfaces

By: Aly Karim Razzak Gaber El-Asady – Ph. D. – 2016

Supervisor(s): Dr. Ashraf Hasan El-Zanaty
(Shear transfer, Concrete-concrete interfaces)

Aerodynamic Stability of Ultra-Long Span Cable-Suspension Bridges

By: Ezz El-Din Kamel Mohamed Aly Khallaf – Ph. D. – 2016

Supervisor(s): Dr. Waleed Atiya, Dr. Ahmed Saleh, Dr. Ihab Ahmed Badr El-Din
(Aerodynamic stability, Cable-suspension bridges, Ultra long spans)

Optimization Models to Prioritize Intervention Projects in Slums

By: Mohamed Fawzy Ahmed Oraby – Ph. D. – 2016

Supervisor(s): Dr. Waleed Atiya, Dr. Omar Hosam El-Din El-Anwar
(Optimization models, Slums, Intervention projects)

Boundary Element Applied to Rafts on Elastic Half Space with Probabilistic Properties

By: Lobna Ezzat Mousa Abdel-Khalek – M. Sc. – 2016

Supervisor(s): Dr. Youssef Fawzy Rashed, Dr. Sameh Fahmy Mehanna
(Boundary element, Rafts, Elastic half space, Probabilistic properties)

Behavior of Rectangular Reinforced Concrete Columns Strengthened with Steel Jacket using Finite Element Analysis

By: Mohamed Fahmy Mostafa Mohamed El-Baragah – M. Sc. – 2016

Supervisor(s): Dr. Waleed Atiya
(Finite element analysis, RC columns, Strengthened columns, Steel jackets)

Efficiency Improvement of Construction Projects using Lean Six Sigma Methodology

By: Ahmed Abdallah El-Taweel – Ph. D. – 2016

Supervisor(s): Dr. Waleed Atiya
(Lean Six Sigma methodology, Efficiency improvement, Construction projects)

Seismic analysis of Non-Structural Elements in Buildings using Different Codes

By: Iman Mahmoud Abdel-Maksoud El-Sherbiny – M. Sc. – 2016

Supervisor(s): Dr. Mohamed Naeem Abdel-Moaty, Dr. Naser Zaki Abou El-Kasem
(Seismic analysis, Non-structural elements, Buildings, Codes)

Optimizing Construction Emissions for Sustainable Construction Projects

By: Islam Ahmed Tarek Abdel-Kader – M. Sc. – 2016

Supervisor(s): Dr. Mohamed Mahdy Marzouk
(Optimizing construction emissions, Sustainability, Construction projects)

Effects of Unequal Height Piers and Pier to Deck Connections on the Uniformity of Seismic Behavior and Inherent Strength of Apparently Irregular Bridges

By: Mina Girgis Ishac Mikhaeil – M. Sc. – 2016

Supervisor(s): Dr. Sameh Fahmy Mehanna
(Piers, Pier to deck connections, Seismic behavior, Irregular bridges)

Evaluation of Force Reduction Factor for Steel Moment Resisting Frames and Concentric Braced Frames in the Egyptian Code

By: Khaled Ahmed Atiya Mohamed – M. Sc. – 2016

Supervisor(s): Dr. Sherif Murad, Dr. Foad Fayez Aly
(Force reduction factor, Steel Frames, Concentric braced frames, Egyptian Code)

Analytical Modeling of Pressurized Water Reactor of Nuclear Power Station Under Static Loads

By: Mohamed Farag Zaki Farag – M. Sc. – 2016

Supervisor(s): Dr. Akram Torky, Dr. Waleed Atiya, Dr. Ihab Ahmed Khalil

(Analytical modeling, Pressurized water reactors, Nuclear power stations, Static loads)

Experimental Post Buckling Behavior of Composite Battered Steel Columns using EPS Concrete Subjected to Axial Loading

By: Mostafa Samy Mohamed Hasanin – M. Sc. – 2016

Supervisor(s): Dr. Maheeb Mohamed Abdel-Ghaffar

(Experimental, Post buckling behavior, Composite columns, Battered steel columns, EPS concrete, Axial loading)

Determination of Critical Wind Speed of Long-Span Suspension Bridges Using Numerical Simulation

By: Ahmed Abdel-Aziz Ahmed Mohamed – Ph. D. – 2016

Supervisor(s): Dr. Waleed Atiya

(Critical wind speed, Long-span bridges, Suspension bridges, Numerical simulation)

Behavior of concrete-filled double skin (CHS inner and CHS outer) steel tubular beam-columns

By: Ahmed Ashraf Mahmoud Saleh Shalaby – M. Sc. – 2016

Supervisor(s): Dr. Mohamed Hasaneen Sorour, Dr. Maha Moddather

(Behavior of beam-columns, Concrete filled steel tubular beam-columns, Double skin)

Numerical Investigation on Shear Strength of End-Web Panels Strengthened with CFRP Laminates

By: Hytham Abdel-Fattah Morsy Shalaby – M. Sc. – 2016

Supervisor(s): Dr. Mazhar Saleh, Dr. Sherif Safar, Dr. Maha Moddather

(Numerical investigation, Shear strength, End-Web panels, CFRP laminates)

Evaluation of Seismic Response Modification Factor of Reinforced Concrete Frames in the Egyptian Code Based on Nonlinear Static Analysis

By: Amira El-Yamany Aly Mohamed – M. Sc. – 2016

Supervisor(s): Dr. Wael Mohamed Khalil El-Degwy, Dr. Waleed Atiya

(Seismic response, RC frames, Modification factor, Egyptian code, Non-linear static analysis)

Structural Analysis for Buildings with Transfer Slabs

By: Mohamed Sayed Abdel-Azim Yamany – M. Sc. – 2016

Supervisor(s): Dr. Ashraf Gamal El-Din Osman

(Structural analysis, Buildings, Transfer slabs)

Investigating the Performance of Nano Silica Concrete Subjected to High Temperature-Corrosive Environments

By: Ahmed Mohamed Yasin Sliman – M. Sc. – 2016

Supervisor(s): Dr. Mohamed Ismael Abdel Aziz, Dr. Mohamed Samy Abdel-Hakim El-Fiky

(Nano Silica concrete, High temperature-corrosive environment)

Prediction of Shear Behavior of Fiber Reinforced Concrete Beams using Neural Networks

By: Shaimaa Abdel-Tawwab Mohamed Rouby – M. Sc. – 2016

Supervisor(s): Dr. Mostafa El-Kafrawy, Dr. Ahmed Abdel Latif El-Nady

(Shear behavior, Fiber reinforcement, RC beams, Neural networks)

Effect of Elevated Temperature on Punching Strength of Flat Slabs in Compression Side

By: Peter Kamil Fakhry Ayoub – M. Sc. – 2016

Supervisor(s): Dr. Mostafa El-Kafrawy, Dr. Said Aly Taher
(Elevated temperature, Punching shear strength, Flat slabs)

CPM Delay Analysis Methodologies in the Egyptian Construction Market

By: Mohamed Magdy Ahmed Mohamed – M. Sc. – 2016

Supervisor(s): Dr. Moheib El-Said, Dr. Hisham Maged Osman, Dr. Maged Ezzat Gorgy
(CPM delay analysis, Egyptian construction market)

A Systems Model for Evaluating Sustainability of Civil Infrastructure Projects

By: Mohamed Matar Aly Matar – Ph. D. – 2016

Supervisor(s): Dr. Moheib El-Said
(Systems Model, Sustainability, Civil infrastructure projects)

Properties of Cementations Composites Incorporating Different Nano Materials

By: Mohamed Samir Aly Khalafallah – Ph. D. – 2016

Supervisor(s): Dr. Moheib El-Said
(Cementations Composites, Nano Materials)

Selecting Demolition Waste Materials Disposal Alternatives Using Fuzzy TOPSIS Technique

By: Mohamed Abdel-Razek Abou Haggag El-Shamy – M. Sc. – 2016

Supervisor(s): Dr. Mohamed Mahdy Marzouk
(Demolition waste materials, Disposal alternatives, Fuzzy TOPSIS technique)

Using of Cement Kiln Dust in the Production of Interlocking Paving Units

By: Ahmed Mohamed Aly Abou El-Ela – M. Sc. – 2016

Supervisor(s): Dr. Mohamed Mohsen El-Attar, Dr. Dina Mahmoud Sadek
(Cement kiln dust, Interlocking paving units)

Studying Economic Impact of Investment in Cairo Metro Terminal Stations

By: Mahmoud Abdel-Rahman Farag Abdel-Karim – M. Sc. – 2016

Supervisor(s): Dr. Moheib El-Said, Dr. Hisham Maged Osman, Dr. Ahmed Abdel-Moamen Khalil
(Economic impact, Investments, Cairo Metro, Terminal stations)

Flexural Strengthening of RC Continuous T-Beams at Hogging Zone Using Different Strengthening Techniques and Materials

By: Ayman Mohamed Mahmoud Abou Rayya – M. Sc. – 2016

Supervisor(s): Dr. Hamed Hadhoud, Dr. Sayed Husain Sayed
(Flexural strengthening, RC continuous T-beams, Hogging zone, Strengthening materials)

Shear Transfer in Composite Concrete-Concrete T-Section

By: Abdallah Mostafa Sliman – M. Sc. – 2016

Supervisor(s): Dr. Mohamed Rabei, Dr. Wael Salah El-Din
(Shear transfer, Composite concrete-concrete, T-sections)

Exploitation of Mobile Devices in Tracking Construction Projects using BIM

By: Mohamed Magd El-Din Mahmoud Adel Zaher – M. Sc. – 2016

***Supervisor(s):* Dr. Mohamed Mahdy Marzouk**

(Exploitation of Mobile Devices, Tracking Construction Projects, BIM)

Further Studies on Punching Problem: Theoretical Basis and Warping Effects

By: Mohamed Rashwan Rabei Rashwan – M. Sc. – 2016

***Supervisor(s):* Dr. Youssef Fawzy Rashed**

(Punching problem, Theoretical basis, Warping effects)

Using Boundary Element Analysis of Cracks in Slabs Using Displacement Discontinuity Based Particular Solutions

By: Abdel-Rahman Foad Fayez Aly – M. Sc. – 2016

***Supervisor(s):* Dr. Ahmed Maher Ragab, Dr. Youssef Fawzy Rashed**

(Boundary Element, Analysis of Cracks, Cracks in Slabs, Displacement Discontinuity solutions)

2015

Studying the Influence of Prestressing and Pounding Loads on Quasi – Isolated PC Cable Stayed Bridges with Rigid Pylon Deck Connection Using Experimentally Verified Model

By: Mohamed Abdel-Shakour Hasan – Ph. D. – 2015

Supervisor(s): Dr. Akram Torky, Dr. Waleed Atiya, Dr. Ihab Badr El-Din Khalil

(Prestressing influence, Pounding Loads effects, Quasi – Isolated, Cable Stayed Bridges, Rigid Pylon Deck Connection)

Long-Term Deflection of Reinforced Concrete Beams with Embedded Steel Section

By: Ahmed Fawzy Ahmed Aly – Ph. D. – 2015

Supervisor(s): Dr. Ashraf el-Zanaty, Dr. Hasan Mohamed Hasan A llam

(Long-Term Deflection, Reinforced Concrete Beams, Beams with Embedded Steel Section)

Experimental and Numerical Investigation of an Innovative Shear Walls Coupling For Enhancement of Seismic Performance of RC Structures

By: Dalia Fawzy Abdel Khalek Arafa – Ph. D. – 2015

Supervisor(s): Dr. Mohamed El-Said Eisa, Dr. Hamed Hadhoud

(Experimental investigation, Numerical investigation, Shear walls coupling, Enhancement of Seismic Performance, RC Structures)

Experimental and Numerical Investigation of Progressive Collapse Behavior of Reinforced Concrete Flat Slab Structures

By: Khaled Mostafa Hasan Ahmed – Ph. D. – 2015

Supervisor(s): Dr. Hamed Hadhoud, Dr. Ahmed Aly Saleh, Dr. Mohamed Zaki

(Experimental investigation, Numerical investigation, progressive collapse, Reinforced concrete flat slabs, RC Structures)

A Numerical Study on Seismic Rehabilitation of Mid-Rise Load-Bearing Masonry Buildings Using Carbon Fiber Reinforced Polymers

By: Mahmoud Mohamed Fathallah Eisa – M. Sc. – 2015

Supervisor(s): Dr. Hamed Hadhoud

(Numerical study, Seismic rehabilitation, Load-bearing masonry, Carbon fiber reinforced polymers)

Development of Methods of Solution for Biaxially Loaded Sections in Accordance with the Egyptian Code of Practice

By: Amr Kamal Mahmoud Merekab – M. Sc. – 2015

Supervisor(s): Dr. Abdel-Hamid Zagho, Dr. Murad Bakhoum

(Solution methods, Biaxially loaded sections, Egyptian code)

Design Requirements of Lateral Bracing of I Beams

By: Mohamed Husain Abdel-Ghany Abdel-Aziz – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Sherif Safar

(Design requirements, Lateral bracing, I beams)

Novel Dispersion Technique of Carbon Nanotube in Combination with Nano Silica in Cement Composites to Enhance Its Mechanical Properties

By: Basant Ahmed Mohamed – M. Sc. – 2015

Supervisor(s): Dr. Mohamed Ismael Abdel-Aziz, Dr. Mohamed Samy Abdel-Hakim

(Dispersion Technique, Carbon Nanotube, Nano Silica, Cement Composites, Mechanical Properties)

Evaluation of Force Reduction Factor for Steel Eccentric Braced Frames

By: Amr Mahmoud Youssef Ahmed Mansour – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Mohamed Hasanin sorour

(Force reduction factor, Steel Eccentric Braced Frames)

Comparison between ASD & LRFD Egyptian Steel Codes for Beam-Columns under Different Live to Dead Load Ratios

By: Abdel-Rahman Mostafa Awad – M. Sc. – 2015

Supervisor(s): Dr. Foad Fayez Aly

(ASD & LRFD Egyptian Steel Codes, Beam-Columns, Live to Dead Load Ratios)

Properties of Normal and High Strength Fiber Reinforced Concrete using Recycled Aggregate and Different fibers

By: Al-Shaimaa Abdel-Menem Husain – M. Sc. – 2015

Supervisor(s): Dr. Adel El-Attar, Dr. Hamed Hadhoud, Dr. Ghada Daaa Abdel-Hamid

(Normal strength concrete, High strength concrete, Fiber reinforced concrete, Recycled aggregates, Fibers)

Effect of Micro piles in Controlling the Impact of Pipeline Deterioration on Adjacent Buildings

By: Nageya Asem Mohamed Mahmoud – M. Sc. – 2015

Supervisor(s): Dr. Adel Yehia Akl, Dr. Manar Maher Husain, Dr. Kamal Ghamry Metwally

(Micro piles, Impact of Pipeline Deterioration, Adjacent buildings)

Structural Behavior of Lightweight Self-Cured Reinforced Concrete Slabs after Exposure to Fire

By: Norhan Osama Hanafy Mahmoud – Ph. D. – 2015

Supervisor(s): Dr. Mostafa El-Kafrawy, Dr. Dina Mahmoud Sadek

(Structural behavior, Self-cured concrete, Lightweight concrete, Reinforced concrete slabs, Exposure to fire)

Developing of A Computer-Based Model for Applying the Price Adjustment Formula in Construction Projects in Egypt

By: Mohamed Magdy Abdallah El-Zidany – M. Sc. – 2015

Supervisor(s): Dr. Moheib El-Said, Dr. Ahmed El-Dakhmeesy

(Computer-based model, Price adjustment formula, Construction projects in Egypt)

Evaluation of Simplified Methods for Second Order In-Elastic Analysis of 2D Steel Frames

By: Amr Ahmed Khalifa Mohamed – M. Sc. – 2015

Supervisor(s): Dr. Maheeb El-Mahdy Abdel-Ghaffar

(Simplified method, Second-order in-elastic analysis, 2D steel frames)

Numerical Evaluation of the Response of Masonry Walls Strengthened with Reinforced Concrete Walls under Blast Loads

By: Sayed Aly Sayed Hasan El-Hayawy – Ph. D. – 2015

Supervisor(s): Dr. Mohamed Naeem Abdel-Moaty, Dr. Mohamed El-Said Eisa

(Numerical Evaluation, Response under blast loads, Masonry walls, Reinforced Concrete Walls)

Study of Seismic Gap between Adjacent Buildings in Accordance to Different Codes

By: Hosam El-Din Abdel-Menem Moharram – M. Sc. – 2015

Supervisor(s): Dr. Murad Bakhoum, Dr. Waleed Atia
(Seismic gap between adjacent buildings, Different codes)

Assessment of Alternative Methods for Calculation of Seismic Separation Distance in Comparison to the Egyptian Code

By: Ahmed Aly Abdel-Fattah Mohamed Mostafa – M. Sc. – 2015

Supervisor(s): Dr. Waleed Atia, Dr. Manar Maher Husain
(Seismic separation distance, Egyptian Code)

Effect of Using Blended Cement on the Behavior of Solid Cement Bricks

By: Ibrahim Mostafa Abdallah Farag – M. Sc. – 2015

Supervisor(s): Dr. Mohamed Mohsen El-Attar, Dr. Dina Mahmoud Sadek
(Blended cement, Solid cement bricks, Effect on behavior)

Flexural Behaviour of Reinforced Concrete Beams with Different Shapes and Lengths of Lap Splice

By: Bahaa Ibrahim Hamed El-Ghandour – M. Sc. – 2015

Supervisor(s): Dr. Mostafa El-Kafrawy, Dr. Said Aly Mohamed Taher
(Flexural behavior, Reinforced concrete beams, Shapes of lap splice, Lengths of lap splice)

Studying the Coupled Effect of Using Nano Silica and Steel Fibers on Fresh and Hardened Concrete Properties

By: Ahmed Salem Gabr El-Baghdady – Ph. D. – 2015

Supervisor(s): Dr. Ahmed Farahat, Dr. Hamed Hadhoud, Dr. Hala El-Kady
(Nano silica, Steel fibers, Effects on fresh and hardened concrete)

Proposed Formula for Natural frequency of R.C buildings in Egypt

By: Zakariya Fikry Zakariya El-Habbal – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Islam Mohamed El-Habbal
(Formula, Natural frequency, R.C. Buildings in Egypt)

Nonlinear Buckling Analysis of Longitudinally and Transversally Stiffened I-Girders Subjected to In-plane Bending

By: Ola Azmy Abdel Fattah Mohamed – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Hazem Ramadan
(Nonlinear buckling analysis, Longitudinally and transversally stiffened I-Girders, In-plane bending)

Enhancement of Reinforced Concrete Mechanical Properties Using Nano Silica

By: Mahmoud Ahmed Abdel-Aziz El-Desouky – M. Sc. – 2015

Supervisor(s): Dr. Mohamed Mohsen El-Attar, Dr. Islam Mohamed El-Habbal
(Enhancement of mechanical properties, Reinforced concrete, Nano silica)

Studying the Effect of Edge distance on the Shear friction capacity

By: Tarek Sabra Ahmed Sabra – M. Sc. – 2015

Supervisor(s): Dr. Ahmed Maher Ragab, Dr. Hatem Hasan Ibrahim
(Edge distance, Shear friction capacity)

GPU Acceleration of the Boundary Element Method for Shear-Deformable Bending of Plates

By: Ahmed Alaa El-Din Mohamed Torky – M. Sc. – 2015

Supervisor(s): Dr. Youssef Rashed

(GPU acceleration, Boundary element method, Shear-deformable bending, Plates)

Effect of Using Stiffeners on the Local Buckling of I-Shaped Plate Girder with Circular Openings

By: Osama Fath El-Rahman Abdallah – M. Sc. – 2015

Supervisor(s): Dr. Waleed Atiya

(Stiffeners, Local buckling, I-shaped plate girders, Girders with circular openings)

Seismic Response Modification Factor for Regular Reinforced Concrete Dual Systems

By: Ismaeil Kotb Emara Kotb – M. Sc. – 2015

Supervisor(s): Dr. Waleed Atiya, Dr. Emad Marei

(Seismic response, Modification factor, Reinforced concrete, Dual systems)

Updating Finite Element Models of Reinforced Concrete Buildings Using Ambient Vibration Testing

By: Ahmed Mohamed Mohamed El-Batish – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Adel El-Attar, Dr. Mohamed Abdel Gawwad

(Finite element models, Reinforced concrete, Buildings, Ambient vibration testing)

Contractors' Evaluation Method during Prequalification Stage in Construction Projects in Egypt

By: Asmaa Ragab Salama Farag – M. Sc. – 2015

Supervisor(s): Dr. Moheib El-Said, Dr. Ahmed El-Dakhmeesy

(Contractors' evaluation, Prequalification stage, Construction projects in Egypt)

Seismic Capacity Assessment of Existing RC Buildings in the Sudan by Using Pushover Analysis

By: Mohamed Ahmed Ibrahim Ismaeil – Ph. D. – 2015

Supervisor(s): Dr. Ezzat Sobeih, Dr. Adel Akl

(Seismic capacity, Existing RC buildings, Buildings in Sudan, Pushover analysis)

Simulating the Effect of Elevated Temperature and Cooling Regime on the Properties of Normal and Self-Compacting Concretes

By: Mohamed Abdel-Sattar Aly Risk – Ph. D. – 2015

Supervisor(s): Dr. Osama Hodhod

(Simulation, Elevated temperature, Cooling regime, Normal concrete properties, Self-compacting concretes)

Theoretical Study on Unsymmetrical Arrangement in Plan of Reinforced Concrete Shear Walls for Braced and Unbraced Buildings

By: Sondos Ibrahim Abdel-Rasoul Mahmoud – M. Sc. – 2015

Supervisor(s): Dr. Bahra Said Lotfy, Dr. Nabawy Gharib

(Unsymmetrical arrangement, RC shear walls, Braced buildings, Unbraced buildings)

Comparison Study on the Effect of Gravity and Seismic Load on Mid-Rise RC Buildings According to Seismic Design Requirements of Eurocode 8

By: Mohamed Samy Ahmed Mahmoud – M. Sc. – 2015

Supervisor(s): Dr. Murad Bakhoun, Dr. Abdel-Hamid Zagho, Sameh Samir

(Comparison study, Effect of gravity and seismic load, Mid-rise RC buildings, Seismic design requirements, Eurocode 8)

Minimizing Socioeconomic Disruptions of Dense Urban Construction

By: Amir Ayman El-Sayed Mahfouz Hasan – M. Sc. – 2015

Supervisor(s): Dr. Mahdy Marzouk

(Minimization, Socioeconomic disruptions, Dense urban construction)

The Effect of Using Nano Materials on the Properties of Cement Paste and Mortar

By: Mostafa Ahmed Mahdy Snousy – M. Sc. – 2015

Supervisor(s): Dr. Hosam Hodhod, Dr. El-Said Zakei El-Din

(Nano materials, Properties, Cement paste and mortar)

Evaluation of Shear Strength of Tapered Plate- Girder Web

By: Basem Hasan Abdel-Baset – M. Sc. – 2015

Supervisor(s): Dr. Hisham Sobhy, Dr. Mohamed Hasanin Sorour

(Shear strength, Tapered web, Plate-girder)

Parametric Study on V/H Ratio from Seismic Records with Comparison to Requirements of Code for Loads Concerning Vertical Seismic Acceleration and Application on Concrete Bridges

By: Abdallah Ahmed Atef Mohamed Hasan – M. Sc. – 2015

Supervisor(s): Dr. Murad Bakhoun

(Parametric study, V/H ratio, Seismic records, Load code requirements, Vertical seismic acceleration, Concrete bridges)

Design of Steel I-beams with Corrugated Steel Webs

By: Nashwa Nabil Ibrahim Sliman – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Ezz El-Din Yazeed

(Design, Steel I-beams, Corrugated steel webs)

Critical Buckling Stress of Castellated Web Plates under Linearly Varying Uniaxial Compression

By: Ahmed Nabawy Hamed Gharib – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Mohamed Hasanin Sorour

(Critical buckling stress, Castellated web plates, Uniaxial compression)

Punching Shear Behavior of Ferro cement Panels Exposed to Elevated Temperature

By: Ahmed Mohamed Saad Ahmed – M. Sc. – 2015

Supervisor(s): Dr. Hamed Hadhoud, Dr. Ghada Diaa

(Punching, Ferro cement panels, Elevated temperature)

Effect of Reducing Concrete Shrinkage on the Axial Capacity of CFT Composite Columns

By: Doaa Mohamed Ahmed Youssef – M. Sc. – 2015

Supervisor(s): Dr. Osman Ramadan, Dr. Sameh Samir, Dr. Hazem Ramadan
(Concrete shrinkage, Axial capacity, CFT composite columns)

Seismic Loads on Liquid Storage Tanks According to ECP-201

By: Mohamed Gamal Gouda Hassan – M. Sc. – 2015

Supervisor(s): Dr. Adel Akl, Dr. Osman Ramadan, Dr. Abbas Abbas
(Seismic loads, Liquid storage tanks, ECP-201)

Displacement Profile for Seismic Design of Steel Dual System of Chevron Braced Frame and Moment Resisting Frame

By: Mohamed Aly El-Safty Abdallah – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Mohamed Hasanin Sorour
(Displacement profile, Seismic design, Steel Dual System, Chevron braced frame, Moment resisting frame)

Ultimate Strength of Tapered Plate Girders under Combined Shear and Bending

By: Farah Fayrouz Fahim El-Deib – Ph. D. – 2015

Supervisor(s): Dr. Metwaly Abou Hamd
(Ultimate strength, Tapered plate girders, Combined shear and bending)

Behavior of Ultra High Strength Concrete Columns Subjected to Axial and Cyclic Lateral Loads

By: Amal Abdel-Menem Ibrahim Ahmed – Ph. D. – 2015

Supervisor(s): Dr. Mohsen El-Attar, Dr. Hosam El-Karmouty
(Ultra high strength concrete columns, Axial loads, Cyclic lateral loads)

A Boundary between Special and Ordinary Steel Moment Resisting Frames Based on Beam Profile Slenderness

By: Mohamed Nasr Abdel-Menem Askar – M. Sc. – 2015

Supervisor(s): Dr. Mohamed Hasanin Sorour
(Special steel frames, Ordinary steel frames, Moment resisting, Beam profile slenderness)

Prediction of Creep in Concrete Using Multi-Gene Genetic Programming Hybridized With Artificial Neural Network

By: Abdel-Aziz Mamdouh Ataya – M. Sc. – 2015

Supervisor(s): Dr. Osama Hodhod, Dr. Tamer El-Sayed Said
(Creep prediction, Concrete creep, Multi-Gene genetic programming, Artificial neural network)

Behavior of Cold-Formed Steel in Moment Resisting Frames

By: Emad Mohamed Shafik Hasan – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Mohamed Hasanin Sorour
(Behavior, Cold-formed steel, Moment resisting frames)

Fresh and Hardened Properties and Proposed Structural Application of Styrofoam Light Weight Concrete

By: Ahmed Alaa El-Din Foad Shihata – M. Sc. – 2015

Supervisor(s): Dr. Osama Hodhod, Dr. Maheeb Abdel-Ghaffar
(Fresh and hardened properties, Structural applications, Styrofoam light weight concrete)

Evaluation of Seismic Performance of Snug-Tight Flush End Plate Connection

By: Sherif Hamed Mohamed Hasanin – Ph. D. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Nabil Abdel-Salam, Dr. Hazem Ramadan
(Seismic performance, Snug-tight, Flush end, Plate connection)

Assessment of Code Provided Seismic Response Modification Factor of Reinforced Concrete Frames

By: Mahmoud Mohamed Abdallah Higazy Sherif – M. Sc. – 2015

Supervisor(s): Dr. Waleed Atiya
(Code provisions, Seismic response modification factor, Reinforced concrete frames)

Investigating the Efficiency of Using the Carbon Fiber Polymer on Beam-Column Connections

By: Mahmoud Mohammadin Youssef El-Deeb – M. Sc. – 2015

Supervisor(s): Dr. Adel Akl, Dr. Kamal Ghabry
(Carbon fiber polymer, Beam-column connections)

Effect of Design Parameters on Column Shortening in Tall Concrete Buildings

By: Islam Abdel-Naby Ahmed Hameed – M. Sc. – 2015

Supervisor(s): Dr. Adel Akl, Dr. Osman Ramadan
(Design Parameters, Column Shortening, Tall Concrete Buildings)

Finite Element Estimates of Punching Shear Strength

By: Gihad Samir Mohamed Younis – M. Sc. – 2015

Supervisor(s): Dr. Adel Akl, Dr. Osman Ramadan
(Finite element estimates, Punching shear strength)

Semantic Risk Assessment for Adcock and Amended Standard Forms of Construction Contracts

By: Ahmed Mohamed Youssef Ezz El-Din – M. Sc. – 2015

Supervisor(s): Dr. Nabil Abdel-Badei, Dr. Maged Gorgy, Dr. Hisham Maged
(Semantic risk assessment, adcock, amended standard forms, Construction contracts)

Strengthening Steel I-Beam with Concrete Flange

By: Soha Zaki Mohamed Husain – M. Sc. – 2015

Supervisor(s): Dr. Mohamed Rabei, Dr. Wael Salah El-Din
(Strengthening, Steel I-beam, Concrete flange)

Analytical and Experimental Assessment of Nonlinear Behavior for Circular Steel Hollow Sections under Bending

By: Islam Yehia Mohamed El-Sayed – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad, Dr. Maheeb Abdel-Ghaffar
(Analytical assessment, Experimental assessment, Nonlinear behavior, Circular Steel hollow sections, Sections under bending)

Experimental and Numerical Study on the Performance of RC Frames in Resisting Progressive Collapse

By: Waleed Mohamed El-Sayed Mohamed – Ph. D. – 2015

Supervisor(s): Dr. Mohamed Naeim Abdel-Moaty, Dr. Mohamed El-Said Eisa
(Experimental study, Numerical study, Performance of RC frames, Progressive collapse)

[A Knowledge System for Evaluating Risk Severity Index in Construction Projects](#)

By: Alaa El-Din Abdel-Razik Fathy Abdel-Razik – Ph. D. – 2015

Supervisor(s): Dr. Nabil Abdel-Badei, Dr. Hisham Maged, Dr. Sherif El-Haggan, Dr. Tarek Hamed
(Knowledge system, Risk severity index, Construction projects)

[Optimum Position of Outrigger System for High-Rise Reinforced Concrete Buildings under Lateral Loads](#)

By: Mohamed Esam Mohamed Sayed – M. Sc. – 2015

Supervisor(s): Dr. Waleed Atiya, Dr. Kamal Ghamry
(Optimum position, Outrigger systems, High-rise reinforced concrete buildings, Lateral loads)

[Investigating the Effect of Boundary Conditions on the Evaluation of Seismic Response Modification Factor of Steel Frames](#)

By: Masoud Maged Mohamed Erhim – M. Sc. – 2015

Supervisor(s): Dr. Waleed Atiya
(Boundary conditions, Seismic response modification factor, Steel frames)

[Progressive Collapse Assessment of Multi- Story Flat Slab Reinforced Concrete Structures Under Gravity Loads](#)

By: Fatma Atiya Bakr Atiya – M. Sc. – 2015

Supervisor(s): Dr. Nabil Abdel-Badei, Dr. Hamed Hodhoud
(Progressive collapse, Multi- story structures, Flat slab reinforced concrete, Gravity loads)

[Boundary Element Analysis of Piled Cap Foundations Considering Correlated Random Misalignments of Piles](#)

By: Sherif Ahmed Sharaf Ahmed – M. Sc. – 2015

Supervisor(s): Dr. Youssef Rashed, Dr. Sameh Samir
(Boundary element analysis, Piled cap foundations, Random misalignments of piles)

[Performance of Reactive Powder Concrete](#)

By: Mostafa Mohamed Ahmed Sayed El-Sherif – M. Sc. – 2015

Supervisor(s): Dr. Mohsen El-Attar, Dr. Dina Sadek
(Performance, Reactive powder concrete)

[Shear Behavior of High Strength Self-Compacting Concrete beams](#)

By: Khaled Raouf Mostafa – M. Sc. – 2015

Supervisor(s): Dr. Wahba El-Tahhan , Dr. Hatem Mostafa
(Shear behavior, High strength concrete, Self-compacting concrete beams)

[Behavior of Concrete-Encased Cold-Formed Steel Columns](#)

By: Ahmed Maher Ahmed Mohamed – M. Sc. – 2015

Supervisor(s): Dr. Sherif Murad , Dr. Ihab Hasan Ahmed
(Behavior, Concrete-encased steel columns, Cold-formed steel columns)

[Procurement Route Selection for Electric Power Plants Projects](#)

By: Lobna Mohamed Talaat El-Mestikawy – Ph. D. – 2015

Supervisor(s): Dr. Mahdy Marzouk
(Procurement Route Selection, Electric Power Plants Projects)

Flexural Load Capacity for Tapered and Straight Beams with Restrained Compression Flange and Slender Web

By: Mohamed Sayed Abdel-Aty El-Sayed – M. Sc. – 2015

Supervisor(s): Dr. Foad Fayez, Dr. Mohamed Masoud El-Saadawy

(Flexural load capacity, Tapered beams, Straight beams, Restrained compression flange, Slender web)

Seismic Performance Evaluation of Reinforced and Post Tensioned Flat Slab Buildings by Pushover Analysis

By: Sherif Esam Abdel-Kader – M. Sc. – 2015

Supervisor(s): Dr. Nayer El-Esnawy , Dr. Hatem Mostafa

(Seismic performance evaluation, Reinforced concrete buildings, Post-tensioned flat slab buildings, Pushover analysis)

Risk Analysis of Construction Project Scheduling Using Monte Carlo Simulation

By: Marwa Ahmed Ramy Rashad – M. Sc. – 2015

Supervisor(s): Dr. Moheib El-Said , Dr. Abdel-Latif Bakry

(Risk analysis, Construction project scheduling, Monte Carlo simulation)

Evaluating Equation of Braced and Un-Braced Building in Egyptian Code

By: Marco Fayek Foad Kheir – M. Sc. – 2015

Supervisor(s): Dr. Ashraf El-Zanaty , Dr. Hamed Hadhoud

(Evaluating equation, Braced building, Un-braced building, Egyptian code)

Durability of Concrete Exposed to Sea Water Attack

By: Lamiaa Eid Sadek Haroun – Ph. D. – 2015

Supervisor(s): Dr. Ahmed Ragab, Dr. Mohsen El-Attar, Dr. Dina Sadek

(Concrete durability, Sea water attack)

Experimental Study of Shear Behavior of Shallow Wide Beams

By: Kloug Kamal Kamel – M. Sc. – 2015

Supervisor(s): Dr. Wahba El-Tahhan, Dr. Hatem Mostafa

(Experimental study, Shear behavior, Shallow wide beams)

Modeling Construction Contractor Selection using Fuzzy Analytical Hierarchy Process

By: Ahmed Mohamed Hasan El-Deeb – M. Sc. – 2015

Supervisor(s): Dr. Mahdy Marouk

(Modeling, Construction contractor selection, Fuzzy analytical hierarchy process)

Live Load Distribution of Precast Concrete U- Girder Bridges

By: Ahmed Zakariya Hanafy Aly – M. Sc. – 2015

Supervisor(s): Dr. Ahmed Amer, Dr. Waleed Atiya

(Live load distribution, Precast concrete, U- girder bridges)

Comparison of Seismic Gap Determination for R.C. Buildings in Different Design Codes

By: Mohamed Mostafa Zoheir Mohamed Fadlallah – M. Sc. – 2015

Supervisor(s): Dr. Waleed Atiya

(Seismic gap determination, R.C buildings, Design codes)

Business Model for Power Generation Construction Organizations Using System Dynamics

By: Omar Atef Abbas Hegazy – M. Sc. – 2015

Supervisor(s): Dr. Mahdy Marzouk, Dr. Abdel-Latif Bakry

(Business model, Power generation, Construction organizations , System dynamics)