# CANDIDATES FOR MASTER'S DEGREES

## College of Engineering

### Biomedical Engineering

**Heba Farid Abed**
Development of a MOF-Based Material for Cholesterol Detection

**Anas Chaari**
Enhanced Brain Source Localization Using Multimodal Signal Fusion of fNIRS and EEG Data

**Joel Nabil Georgeous**
Noninvasive Breath Acetone Sensor for Diabetes Diagnosis

**Rukaia Khaldoun Makhlouta**
EEG-Based Brain Source Localization of Mental Stress

**Reem Mazen Senjab**
The Use of Ramucirumab Conjugated Liposomes and Ultrasound in Cancer Treatment

### Chemical Engineering

**Lily Tariq Alshanti**
Nanoparticle-Enhanced Ionic Liquids for Thermal Energy Storage

**Zeina Ashraf Elshahawi**
Encapsulation of Ionic Liquids for Energy Storage Applications

**Iffat Fatima**
Self Humidified PVDF Composite Membranes for PEM Fuel Cells

### Civil Engineering

**Abdel Razzaq Khalil Abu Othman**
Bearing Capacity Factors for Spread Footings on Soft Clay Stabilized With a Sandy Trapezoidal Trench

**Abrar Ahmad**
Shear Strength and Deformation of Recycled Concrete Aggregate-Dune Sand Admixture

**Sadiq Duraid Al-Bayati**
Behavior of Reinforced Concrete Columns Embedded with PET Bottles Under Pure Axial Compression

**Mohammed Layth Al-Dawood**
Fire Performance of GFRP Beams

**Laila A. M. F. Alomar**
Understanding Potential Brine Disposal Impacts of a Desalination Plant on Coastal Waters

**Monia Najib Gharzeldeen**
Behavior of Ultra-High Performance Concrete Slabs under Fire Exposure

**Habibelrahman Hassan Mohyeldin Hassan**
Experimental Evaluation of 3D Printed Concrete

**Abdelrahman H. H. Hindieh**
Structural Behavior of Reinforced Concrete Members Made With 100% Recycled Materials and No Cement

**Haifa Parayil Valappil**
Development of High-Resolution MT-InSAR-based Structural Health Monitoring System for Use in the UAE

**Anas Mohamed Saber**
Shear Response of Ultra High Performance Concrete Deep Beams with Holes

**Hussam Abdelkarim Safieh**
Cyclic Loading Performance of Beam-Column Joints Employing Different Ratios of Fly Ash and GGBFS Mixes

**Noureldin Islam Sallam**
Shear Strength and Pullout Capacity of Recycled Aggregate-Dune Sand Admixture as a Backfill Soil

**Prateek Uppin**
Shear Response of GFRP RC Deep Beams with Horizontal and Vertical Web Reinforcement

### Computer Engineering

**Mohamed Adel Almaazmi**
Formal System Modeling of Security In Vehicular Communication Using Event-B And Tamarin Prover

**Reem H. R. S. Alshammari**
Enhancing IoT Security through Artificial Intelligence

**Ibrahim Khaleel Eksheir**
Scalable Machine Learning Pipelines

### Construction Management

**Sara Nezar Al Armouti**
AI-Based Decision Model Predicting Sustainability Objectives Based on Contractor's Characteristics

**Roudha Mahmoud Ali**
Impact of Water Pipe Leakage on Road Infrastructure Integrity

**Lara Omar Dhin**
Construction Waste Management

**Tanweer Ahmed Riaydh**
A Decision Support System for Retrofitting Structures

### Electrical Engineering

**Saleh Ali Abdalla**
Optimization Techniques for Adaptive Video Streaming

**Omar Abdelaziz Abdelaziz**
Photovoltaics Fault Diagnosis and Cleaning Estimation Using Machine Learning Based Techniques

**Zainab R. M. Abuowda**
Calibration and Verification of a Microwave Tomography System for Biomedical Applications

**Shoaib Ahmed**
Artificial Intelligence-Driven Electric Vehicle Traction System for Sustainable Transportation

**Tariq Mohamed Salim Mohamed Almutawa**

**Saif Rashid Alsuwaidi**
Management of Battery Swap Stations for EVs in the UAE

**Mohammad Rabih Aziz**
Predistortion of Dual-band Power Amplification Systems

**Yazan Barbar**
Blockchain-Based Cyber Attack Detection in Protective Relaying

**Osama Moustafa Elbeltagy**
Optimizing Energy Consumption for Enhanced Efficiency in Data Centers

**Tarnim Usama Nos**
DASH Streaming Using Layered Coding

**Yousef Hassan Serag**
Smart Grid Resilience

## Engineering Systems Management

Sara Hussein Abu Iktish
Healthcare System Optimization Using Data Science: Trauma Room

Azza Abdulla Al-Ali
Optimizing Fleet Charging of Electrical Vehicles

Soha Al-Asheh
Management in Healthcare

Laila Ayman Al Baya'a
Transformation of Automotive Preventive Maintenance to Predictive Maintenance

Hamad A. Rahman Albinali
Cost Optimization Model for the Multi-Resource Leveling

Haneen M. E. M. Alrabiah
Evaluating the Economic Feasibility of Environmentally Friendly Healthcare Waste Management Practice

Abdalla Abdelrahman Alshamsi
Exploring The Potential of Generative Artificial Intelligence in Chemical Engineering

Fatema Khamis Alshehhi
Using AI For Process Improvement in the Oil and Gas Industry

Abdalla Waheeb Alzarooni
Build Sustainable Data Centers Using Optimization Techniques and IoT Devices

Farah K. A. Balaha
Design and Implementation of an Artificial Intelligent Machining System for Quality 4.0

Rahaf Adel Haroun
The Supplier Selection Certification in the Era of Digital Technologies

Mohamed Ali Mohamed
Electrification of Public Transport

Nasija Suhail
The Utilization of Augmented Reality in Engineering Education

## Machine Learning

Dia' Addeen Ibrahim Abuhani
Measuring Trees Alpha Diversity Through Unsupervised Learning

Muhammed Noshin Poovan Kulathil
Lossless ReLU Matrix Factorization: A Novel Approach for Low-Rank Compression

Ansah Juned Siddiqui
Multi Modal Fusion for Skin Cancer Prognosis

## Mechanical Engineering

Mohammed Nazih Al Hadi
Theoretical and Experimental Analysis of Electrostatic MEMS Resonators for Sensing and Filtering

Omran Radwan Chaker
Investigating the Impact of Heat Treatment on Chemical Short-Range

Abdalhadi M. H. Fayad
A Comprehensive Analysis for Improved ASTM Standard Accuracy

Kareem Ahmed Morsi
Innovative Design, Modeling and Construction of Loop Heat Pipe for Thermal Management Applications

Abdulrahman Yosri Salem
Electric Vehicle Battery Life Cycle Management Framework

Masa Bashar Ahmad Touqan
Crack Detection and Identification Using 3D Digital Image Correlation

## Mechatronics Engineering

Amer Khamis Al Juran
Optimizing Multi-Sensor Fusion with Intelligent System For Real-Time Navigation

Abdelrahman Ahmed Alblooshi
Quadrotor Altitude/Attitude Control using Adaptive PID

Fatma Ali Alfalasi
Karim Mohamed Diab
H-Adaptive and Gaussian Processes Techniques for High-Accuracy State Estimation of Ground Vehicles

Mohammad Khaled Rashwan
Adaptive Hybrid Sensor Fusion for Enhanced Outdoor Vehicle Localization in Complex Environments

Shadi Mohamad Saadeddin
A Hybrid Control Approach for Autonomous Vehicles Based on Model Predictive Control