Areas of Expertise of Faculty and Staff Members
Areas of Expertise of Faculty and Staff Members

Faculty Expertise

Dean

Prof. Ahmed Al-Shamma’a (Dean)
BSc, MSc, PhD, DSc
University of Liverpool, UK
- Applied electromagnetic waves
- None invasive sensing
- Communications, IoT
- Industrial microwave applications
- Industry 4.0
- Advance Data analytics
- Structure health monitoring

Architectural Engineering (AE) department

Prof. Abbas Elmualim (Chair)
PhD, Sustainable Architecture and Construction, University of Reading, UK, 2003
- Environmental architectural engineering
- Intelligent and stainable facilities management
- Digital technologies and virtualization in architecture, engineering and construction
- Construction project management and corporate governance
- Global construction and universal HE
- Resilient communities and social enterprises

Prof. Zaki Aslan
PhD, Cultural Heritage Conservation and Management, University of London, United Kingdom, 2007

Dr. Alex Opoku
PhD, Construction and Project Management, University of Salford, Manchester, UK, 2013
- Sustainable Built Environment
- SDGs, Cities and Biodiversity
- Sustainable Infrastructure Delivery
- Urban Regeneration & Sustainable Housing
- Construction Project Management
Areas of Expertise of Faculty and Staff Members

Dr. Emad S. Mushtaha  
Ph.D., Architectural Planning of Living Environment, Hokkaido University, Japan, 2006  
- Architectural Planning and Design Management  
- Sustainable Built Environment (Thermal performance, thermal comfort, passive design, daylight, etc.)  
- Environmental Psychology and User Behavior

Dr. Monther Jamhawi  
- Planning for Cultural Heritage Conservation and Management, Vernacular & Traditional Architecture  
- Sustainable Tourism and Community Development  
- ICT Applications in Heritage Interpretation and Management

Dr. Mamun Rashid  
PhD, Built Environment / Architecture, The University of New South Wales (UNSW), Sydney, NSW 2052, Australia, 2012  
- Housing & Urban studies  
- Geography, Planning & Development  
- Architectural Design & Construction  
- Vernacular Architecture & Tectonics  
- User Perception & Residential Satisfaction

Dr. Samir Mohammed Dirar  
PhD in Engineering, University of Cambridge, United Kingdom, 2010  
- Sustainability and resilience of civil engineering structures  
- Construction materials with low environmental impact  
- Structural analysis and design  
- Finite element modelling of concrete, steel, and aluminium structures  
- Strengthening and retrofitting of existing structures

Dr. Ahmad Sukkar  
PhD, Architectural Humanities and Cultural Studies, University of London, UK, 2015  
- History, theory, and criticism of traditional and modern Islamic art, architecture, and urbanism; contested cultural heritage and its management;  
- Architectural humanities, spirituality, philosophy, cosmology, and creative writing;  
- urban displacement and conflict, informal architecture, design ethics, spatial justice, resilient conservation, reconstruction, and urban development planning;  
- Parametric urbanism, digital architecture, and algorithmic design.

Dr. Ahmed Abdeen Saleem  
Ph.D. in Energy Resources Engineering from Egypt-Japan University of Science and Technology (EJUST)
Areas of Expertise of Faculty and Staff Members

Dr. Aref Maksoud
PhD (Architecture) Computational design and digital fabrication, Universitat Internacional de Catalunya (UIC), Escola Superior De Arquitectura, EsArq_UiC, Barcelona - Spain (2017)
- Contemporary architecture, Computational design, and the use of Strategies and Digital tools in architecture.
- Usage of Extended Reality (XR), Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR) in architecture.
- IoT in architecture and design/human-to-computer interaction.
- Bio-Digital design strategies and Materials.
- Artificial Intelligence and its application in architecture.
- Machine learning and generative design.
- Digital fabrication technologies with interest and knowledge in biomimetic design.

Dr. Aseel Ali Hussien
PhD, Augmented Reality and Agile Philosophy, Liverpool John Moores university (LJMU), UK, 2017
- Virtual Reality (VR) and Augmented Reality (AR) in Architecture engineering.
- Building Information Model (BIM)
- Bio-Based Construction Building Materials
- Agile and Lean project management.
- Energy consumption and CO2 Emission.
- Internet of Things IoT

Dr. Majd Musa
PhD, Architecture, University of Illinois at Urbana-Champaign, USA, 2013
- Contemporary architecture and urbanism
- Globalization and the urban built environment of Middle Eastern cities
- Identity and meanings in the urban built environment
- Political and economic forces in architecture and urbanism
- History, theory, and criticism of architecture and urban planning
- Architectural education

Dr. Moohammed Wasim Yahia
BSc, MSc, MScRes, PhD, Arch Department of Architecture and Built Environment, Lund University, Sweden (2014)
- Sustainable urban design and planning
- Architecture design
- Climate sensitive design
- Microclimate and Outdoor thermal comfort
- Sustainable housing

Dr. Reyhan Sabri
PhD, Architecture Engineering, The University of Manchester, UK, 2014
- History and theory of architecture
- Islamic Architecture
- Waqf's role in the formation and preservation of built environments in Islamic cities
- Evolution of architectural conservation philosophies and practices
- Heritage management
- Conservation of heritage sites and buildings in colonial and post-colonial world
Areas of Expertise of Faculty and Staff Members

Dr. Salem B. Abdalla Salem
PhD, Architecture Engineering, Berlin University of Technology (TU Berlin), Berlin, Germany, 2009
- Building Information Modeling BIM
- Digital Architecture
- Computer Aided Design CAD tools and techniques
- Virtual Reality/Augmented reality and GIS, Interoperability and data sharing amongst the AEC industry

Dr. Vittorino Belpoliti
PhD, Energy Technologies, University of Udine, Italy, 2011
- Environmental Design
- Design for Social Inclusivity
- Green Buildings
- Energy Technologies

MS. Mariam Hassan
MAS, Architecture, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland, 2003
- Architectural and Urban Design
- Universal and Barrier-Free Design

Ms. Marta Bialko
MSc, Architecture and Urban Design, University of Technology Wroclaw, Poland, 2004
- Construction and demolition waste management
- Recycling
- Sustainable construction
- Sustainable architecture
- Sustainable project management

Ms. Sumana Hossain
MSc, Department of Urban Planning and Design, University of Hong Kong, Hong Kong, 2005
- Architectural Design
- Urban design and Technology
- Design for Social Impact
- Public realm enhancement and user's perception
- Walkability in the built environment

Ms. Usha Rani
MLA, Master in Landscape Architecture, School of Planning and Architecture, N.Delhi, India
- Architectural Design
- Sustainable Urban & Landscape Design
- International Expert in Universal Design in Architecture, Urban & Landscape (UNDP)
Areas of Expertise of Faculty and Staff Members

Department of Civil and Environmental Engineering

**Prof. Ghazi Al-Khateeb** (Chair)
PhD, Civil Engineering, University of Illinois, Urbana-Champaign, USA, 2001
- Sustainable pavement and bituminous materials
- Dynamic testing and modeling of asphalt binders and mixtures
- Mechanistic performance analysis of asphalt pavements
- Pavement damage and mechanics
- Superpave mix design
- Aging of asphalt pavements

**Prof. Abdallah Shanableh** (Director of the Institute of Sciences and Engineering Research)
PhD, Civil Engineering, University of Texas at Austin, 1990
- Water and wastewater treatment & Reuse
- Environmental Monitoring & Remote Sensing
- Waste resource management
- Water resources
- Geo-environmental studies
- Advanced materials in environmental studies

**Prof. Mohamed Maalej** (Vice Dean)
PhD, Civil Engineering, University of Michigan, 1994
- High Performance Fiber Reinforced Cementitious Composites (HPFRCC)
- Micromechanics of fibrous composites
- Corrosion durability of reinforced concrete
- Structural repair and retrofitting
- Impact/blast resistance of HPFRCC
- Structural health monitoring

**Prof. Samer Barakat**
PhD, Civil Engineering (Structural Engineering), The University of Colorado, Boulder, USA, 1994
- Design of RC, PSC and Steel Structures (Buildings and Bridges)
- Structural reliability Reliability-based design and optimization
- Earthquake risk analysis and mitigation
- Lab testing of scaled structural elements and systems

**Prof. Radhi Azubaidi** (Director of the Center for Continuing Education and Professional Development)
PhD, Civil Engineering, Strathclyde University, Glasgow, United Kingdom, 1984
- Foundation Design
- Site Investigation
- Engineering Management
- Project Planning
- Project Supervision
Areas of Expertise of Faculty and Staff Members

Prof. Salah Altoubat
PhD, Civil Engineering, University of Illinois at Urbana-Champaign, USA, 2000

- Sustainability and durability aspects of concrete
- Structural applications of Fiber Reinforced cementitious Composites
- Eco-friendly Concrete technology
- Structural repair and retrofitting
- Testing of Structural systems and health monitoring
- 3D Concrete Printing

Prof. Maher Omar (Director, Institute of Leadership in Higher Education)
PhD, Civil Engineering, Southern Illinois University, USA, 1995

- Soil Stabilization using Synthetic Fibers
- Landfill Analysis & Design
- Soil Remediation
- Soil-Structure Interaction, Geo-Hazard Identification & Assessment
- Soil Dynamics and Earthquake Engineering
- Engineering Education
- Innovative Pedagogy, Student Engagement, and Educational Leadership

Prof. Rami Al-Ruzouq
PhD, Civil Engineering, University of Calgary, Canada, 2004

- GIS and Remote Sensing for Hazard Mapping and Environmental Monitoring
- Time Series Land Cover Mapping and Change Detection
- Geo-Hydrological and Groundwater Mapping
- Photogrammetry and UAV for 3D modeling in construction and archeology
- Urbanization and Smart Cities.

Prof. Tewfik Mahdi
Ph.D., Civil Engineering

- Artificial Intelligence and Biologically Inspired Systems
- Industry 4.0 and Advanced Sensing
- Biomedical Engineering
- Smart Cities and Intelligent Systems

Dr. Khaled Hamad
PhD, Civil Engineering, University of Delaware, USA, 2004

- Intelligent Transportation Systems
- Traffic Operations
- Highway Design and Safety
- Sustainable Transportation Planning
- Artificial Intelligence Applications in Transportation Engineering
- Environmental Impacts of Transportation

Dr. Tarek Merabtene (Director of the Office of International Relation)
PhD, Civil Engineering, Kyushu University, 1999

- Water Resources Management
- Application of AI to Water Systems
- Water Risk Management
- Hydraulic Design of Water Systems
<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Areas of Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Moussa Leblouba</td>
<td>Structural Engineering, Earthquake Engineering, Structural Dynamics</td>
</tr>
<tr>
<td>Dr. Saleh Abu Dabous</td>
<td>Infrastructure engineering and management, Bridge management systems, Project planning and control, Project cost engineering, Decision support systems</td>
</tr>
<tr>
<td>Dr. Waleed Zeiada</td>
<td>Advanced characterization of construction materials, Sustainable materials (polymer, rubber, fiber, warm mix asphalt, bio binders, pervious concrete and asphalt mixtures, etc.), Nanomaterials applications in construction, Recycling of construction materials, Soil stabilization technologies for pavement applications, Mechanistic-empirical pavement design, Climate-Resilient Infrastructures, 3-D Printing for Construction Applications</td>
</tr>
<tr>
<td>Dr. Mohamed Arab</td>
<td>Bio-cementation and bioinspired geo-techniques, Use of waste material (industry byproducts) for soil improvement, Finite difference and finite element numerical analysis of geotechnical structures, Static and dynamic characterization of the municipal solid waste mechanical properties, Earthquake engineering for transportation facilities, Geologic hazard evaluation and mitigation</td>
</tr>
<tr>
<td>Dr. Muamer Abuzwidah</td>
<td>Traffic Safety, Climate Change and Transportation Systems, Self-Driving Transport, Driving Simulations, Intelligent Transportation Systems, Transportation Modeling</td>
</tr>
<tr>
<td>Dr. Muhammad Talha</td>
<td>Construction Materials, Durability of Concrete, Strengthening and Retrofitting, 3D Printing, Sustainable cementitious materials</td>
</tr>
</tbody>
</table>
Areas of Expertise of Faculty and Staff Members

Dr. Mohamed Abdallah
PhD, Environmental Engineering, University of Ottawa, Canada, 2011
- Integrated solid waste management
- Waste to energy systems
- Wastewater treatment and recovery
- Sustainable development and carbon footprint
- Environmental life cycle assessment
- Smart cities

Dr. Zaid Al-Sadoon
PhD, Civil Engineering, University of Ottawa, Canada, 2016
- Design of earthquake resistant concrete structures
- Seismic risk mitigation, including the use of buckling restrained braces
- Retrofitting of concrete structures
- Dynamic time history inelastic analyses of buildings
- Performance-based seismic design (PBSD) of buildings
- Large-scale testing

Dr. Sourjya (Shorjo) Bhattacharjee
PhD, Civil and Environmental Engineering, McGill University, Canada, 2016
- Water treatment and reuse
- Engineered Nanomaterials
- Site remediation
- Emerging and legacy pollutants
- Resource recovery

Dr. Ram Kumar Bharadwaj Mantha
PhD, Civil Engineering and Construction Engineering and Management, University of Michigan, USA, 2018
- Cybersecurity in the AEC industry
- Construction Automation and Robotics
- Sustainability in Civil Infrastructure Systems
- Data Analysis and Visualization
- Human Technology Interaction

Ms. Faiza Shadoud
MSc, Mechanical Engineering, University of Technology, Baghdad, 1988
- Engineering Drawing
- AutoCAD
- Materials for Civil Engineering
- Renewable Energy
- Solar Energy
- Fluid Dynamics
- Heat Transfer
- Engineering Education

Mr. Ali Ahmad Tahmaz
MSc, Civil Engineering (Geotechnical Engineering), Jordan University for Science and Technology, 1992
- Foundation Design, Design of Shoring and Retaining Walls, and Machine foundations
- Slope Stability Analysis and Design
- Soil Improvement & Stabilization Techniques
- Soil Investigation Techniques
- Team management, site inspection, cost proposals and scheduling
- Perform, Evaluate and Assess Field and Laboratory Testing for Soil and Concrete Materials
- Perform safety analysis against liquefaction.
- Seismic Site Response and Microzonation
- Geotechnical Earthquake Engineering
Areas of Expertise of Faculty and Staff Members

Department of Electrical Engineering

**Prof. Soliman Awad Mahmoud** (Chair)
PhD, Electronics and Communications, Cairo University, Egypt, 1999
- Mixed Analog-Digital IC Design
- Low-voltage low-power designs
- Application Specific Integrated Circuits (ASIC) design
- Design of high frequency filters using programmable Analog Building Blocks like CMOS trans-conductors and current conveyors

**Prof. Maamar Bettayeb** (Vice Chancellor for Research and Graduate Studies)
PhD, Electrical Engineering, University of Southern California, Los Angeles, California, USA, 1981
- Non-Linear Control Systems
- Digital Signal Processing
- Wavelets and Applications, Higher, Order Statistics and Applications
- Decentralized Estimation and Control
- Optimal Model Reduction
- Neural Networks and Fuzzy Logic, Ultrasonic Non-destructive Testing, Renewable Energy Systems, Engineering Education

**Prof. Abdul-Kader M. Hamid**
PhD, Electrical Eng. University of Manitoba 1991
- Applied Electromagnetics
- Analog & Power Electronics
- Renewable Energy
- Image Processing
- Smart Grid
- Sensors
- PV cooling
- IoT

**Prof. Ahmed Elwakil**
PhD, Electrical & Electronic Engineering, University College Dublin, 2000
- Linear and Nonlinear Circuits
- Circuit Theory
- Electronic circuit design
- Nonlinear dynamics
- Energy storage
- Bio-Impedance
- Fractional-order systems
- Mathematical modeling

**Prof. Ramesh Bansal**
PhD, Electrical Power/Renewable Energy, IIT Delhi, India, 2003
- Renewable Energy Power Systems
- Smart Grid
- Photovoltaics (PV), hybrid power systems, distributed generation, grid integration of renewable energy
- Power systems analysis, and Power quality
Areas of Expertise of Faculty and Staff Members

Prof. Amr Mohamed El-Nady
PhD, Electrical Engineering University of Waterloo, Waterloo, ON, Canada, 2004
• Power System Control Using FACTS
• Distribution System Operation and Control along with Power Quality Detection and Mitigation
• Microgrid/Smart grid Control
• Power Electronics Applications in Power Systems
• Digital Signal Processing Applications in Power Systems

Prof. Hissam Tawfik
PhD in Electronic and Electrical Engineering, University of Manchester (UK), 2000
• Artificial Intelligence and Biologically Inspired Systems
• Industry 4.0 and Advanced Sensing
• Biomedical Engineering
• Smart Cities and Intelligent Systems

Prof. Abir Jaafar Hussain
Ph.D. in Medical Image and Signal Processing, 2000

Dr. Ismail Shahin
PhD, Electrical Engineering, Southern Illinois University at Carbondale, IL, USA, 1998
• Digital Signal Processing
• Speaker Recognition
• Speech Processing and Recognition
• Talking Condition and Emotion Recognition
• Arabic Natural Language Processing
• Human-Computer Interaction based on speech
• Language Recognition
• Accent Recognition
• Gender Recognition using voice
• Age Recognition using voice

Dr. Anwar Hasan Jarndal
PhD, Electrical Engineering from the University of Kassel, Kassel, Germany, 2006
• Active Devices Modeling
• Devices and Circuits Characterization
• Power Amplifiers Design
• Low-Noise Amplifiers Design
• Optimization Techniques
• Neural Networks Based Modeling
• Radio Channel Modeling
• Wireless Power Transfer

Dr. Raouf Fareh
PhD, Electrical engineering, ETS, University of Quebec, Montreal, Quebec, Canada, 2013
• Robotics: manipulators, mobile robots, UAVs
• Linear and Nonlinear Control Engineering: Robust control, Adaptive control, ADRC, Synergetic control
• Vision-based Path Planning
• Rehabilitation robotics
### Areas of Expertise of Faculty and Staff Members

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Areas of Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dr. Sohaib Majzoub</strong>&lt;br&gt;PhD, Electrical and Computer Engineering, University of British Columbia (UBC), Vancouver, BC, Canada, 2010</td>
<td>• Electronic Circuit Design&lt;br&gt;• Embedded System Design&lt;br&gt;• Delay and Power Macro-Modelling&lt;br&gt;• Process Variation Analysis and Modelling&lt;br&gt;• System-Level Processor optimization using AI&lt;br&gt;• Low Power Manycore Design</td>
</tr>
<tr>
<td><strong>Dr. Ali Ahmad Adam</strong>&lt;br&gt;PhD, Yildiz Technical University-Turkey, 2007</td>
<td>• Electric motor drives&lt;br&gt;• Torque&lt;br&gt;• Speed and position control&lt;br&gt;• Torque Ripples&lt;br&gt;• Harmonics and Noise Reduction in Electric Motor&lt;br&gt;• Electric vehicles&lt;br&gt;• Electromagnetic leakages from electric devices&lt;br&gt;• Power electronics application</td>
</tr>
<tr>
<td><strong>Dr. Sofiane Khadraoui</strong>&lt;br&gt;PhD, Automatic Control, University of Franche-Comte, France, 2012</td>
<td>• Modeling and robust control design&lt;br&gt;• Model-free and model-based control design&lt;br&gt;• Active disturbance rejection control design&lt;br&gt;• Control design using interval analysis&lt;br&gt;• Control design for systems with non-smooth nonlinearities&lt;br&gt;• Process monitoring and fault detection</td>
</tr>
<tr>
<td><strong>Dr. Saeed Abdallah</strong>&lt;br&gt;PhD, Electrical Engineering, McGill University, Montreal, Canada, 2013</td>
<td>• Wireless Communication Systems&lt;br&gt;• Relay networks&lt;br&gt;• OFDM Systems&lt;br&gt;• Channel Estimation and Detection&lt;br&gt;• Time and Frequency Synchronization&lt;br&gt;• MIMO Systems&lt;br&gt;• Molecular Communication</td>
</tr>
<tr>
<td><strong>Dr. Khawla Alnajjar</strong>&lt;br&gt;PhD, Electrical and Electronic Engineering, University of Canterbury, New Zealand, 2015</td>
<td>• Next Generation Communication, Networking and Signal Processing&lt;br&gt;• Stochastic Models in Information theory</td>
</tr>
<tr>
<td><strong>Dr. Eqab Almajali</strong>&lt;br&gt;PhD, Electrical Engineering, University of Ottawa, Canada, 2014</td>
<td>• Millimeter-wave 5G Antennas.&lt;br&gt;• 5G/6G Metasurfaces&lt;br&gt;• FSS, Transmitarrays, Reflectarrays.&lt;br&gt;• Artificial intelligence enabled Antennas design.&lt;br&gt;• Robust Deep Learning-based Detection of RFID tags.&lt;br&gt;• Communications, IoT.&lt;br&gt;• Industrial microwave applications.</td>
</tr>
</tbody>
</table>
Areas of Expertise of Faculty and Staff Members

Dr. Venkata Veera Muralee Gopi Chandu
PhD, Electrical Engineering, Pusan National University, Busan-South Korea, 2018
- Energy conversion (photovoltaics)
- Energy storage (Supercapacitors and Batteries)
- Fast charging
- Nanomaterials and its applications in Energy
- Nanotechnology

Dr. Mahmoud Ahmed Albreem
PhD, Wireless and Mobile Systems, Universiti Sains Malaysia (USM), 2013
- Signal processing for wireless communication systems
- Massive multiple-input multiple-output (MIMO)
- Detection and Precoding Techniques
- Green Internet of Things

Mr. Mahmoud I. Abu Shammeh (Director of the Central Laboratories)
M.Sc. Electrical Engineering (Communications), University of Jordan, Amman, Jordan, 1993
- Digital Communication Systems
- Applied Electronic Circuits
Department of Industrial Engineering and Engineering Management

Dr. Ali Cheaitou (Chair)
PhD, Industrial Engineering, Ecole Centrale Paris University, France, 2008
- Supply chain management
- Maritime transportation
- Applied optimization
- Production planning
- Inventory control

Prof. Gordian Udechukwu Ojiako
Barrister (England & Wales), Honourable Society of the Middle Temple, 2022
PhD, Business, University of Hull, 2015
PhD, Project Management, University of Northumbria at Newcastle, 2005
- Project management
- Decision making (soft)
- Law (alternative dispute resolution in engineering and project management)

Prof. Imad Alsyouf (Director of the Sustainability Office)
PhD, Terotechnology (Maintenance and Reliability Engineering), Linnaeus University, Sweden 2004.
- Maintenance engineering and management
- Reliability engineering
- Productivity improvement
- Lean production
- Total quality management (TQM)

Prof. Muhammad Shamsuzzaman
PhD, IEEM, Nanyang Technological University, Singapore, 2005
- Statistical quality control
- Applied Statistics
- Design and applications of control charts
- Lean six sigma
- Multicriteria decision-making

Prof. Atidel Aboubaker Ben Hadj-Alouane
Ph.D., Industrial and Operations Engineering, The University of Michigan, Ann Arbor, USA 1994
- Statistical quality control
- Applied Statistics
- Design and applications of control charts
- Lean six sigma
- Multicriteria decision-making
Areas of Expertise of Faculty and Staff Members

Prof. Firki Dweiri  
PhD, Industrial Engineering, The University of Texas at Arlington, TEXAS, USA, 1995  
- Quality management  
- Multicriteria decision-making

Prof. Hamdi Bashir  
PhD, Industrial Engineering McGill University, Canada, 2000  
- Project management  
- Quality management (TQM)  
- Manufacturing systems & group technology  
- Health care management

Dr. Dorid Dalalah  
PhD, Industrial and System Engineering, Lehigh University- PA/USA, 2005  
- Operations research/management  
- Simulation  
- Data analytics and decision-making  
- Maintenance and reliability  
- Financial risk analysis

Dr. In-Ju Kim  
PhD, Majored in Ergonomics, Biomechanics, and Safety Engineering Faculty of Health Sciences, University of Sydney, Sydney, Australia  
- Occupational safety  
- Injury analysis and prevention  
- Ergonomics/human factors issues  
- Occupational biomechanics  
- Safety engineering (Sports, nanotechnology)

Dr. Salah Haridy  
PhD, Systems Engineering and Management, Nanyang Technological University, Singapore, 2014  
- Quality engineering and statistical process control  
- Design of experiments  
- Engineering statistics  
- Reliability analysis  
- Six sigma

Dr. Mohammad Miftaur Rahman Khan Khadem  
PhD in Industrial Engineering, University of Wisconsin–Milwaukee, USA, 2004  
- Manufacturing System (Performance Evaluation)  
- Ergonomics/human factors issues  
- Occupational Health and Safety  
- Supply Chain Management  
- Lean Manufacturing
Areas of Expertise of Faculty and Staff Members

Dr. Hamad Rashid
PhD, Maintenance Management, Human factors effects on maintenance, Cranfield University, 2010
- Safety management systems
- Complex human-machine interaction systems
- Aviation maintenance
- Aviation safety

Dr. Malek Masmoudi
PhD, Industrial Engineering, ISAE-Supaero, University of Toulouse, France, 2011
- Operations research/management
- Hybrid optimization algorithms
- Simulation
- Project and Production Planning and Scheduling
- Healthcare management, Supply chain, and Maintenance

Dr. Zehra Canan Araci
PhD, Lean Product and Process Development, Cranfield University, UK, 2017
- Lean Manufacturing
- Lean Six Sigma
- Lean Product and Process Development
- Quality Management
- Total Quality Management

Dr. Ridvan Aydin
PhD, Industrial and Systems Engineering, The Hong Kong Polytechnic University, Hong Kong, 2016
- Product development
- Sustainable product design
- Remanufacturing
- Closed-loop supply chains
- Production planning

Dr. Concetta SEMERARO
PhD, Industrial Engineering, POLYTECHNIC University of Bari (Italy), Italy 2020
- Industry 4.0,
- Digital Twin
- Cyber-Physical Systems
- Artificial Intelligence
- Data Analytics

Dr. Sameh Al-Shihabi
PhD, Industrial and Manufacturing Systems Engineering, Iowa State University, USA, 2002
- Hybrid optimization algorithms
- Simulation
- Predictive analytics
- Project management and finance-related problems
- Supply chain
**Mr. Mohammad Awni**
MSc. in Nuclear Power Plant Engineering
- Probabilistic Risk & Safety Assessment
- Risk Management
- Total Quality Management
- Lean Six Sigma
Areas of Expertise of Faculty and Staff Members

Mechanical and Nuclear Engineering Department

**Prof. Naser Nawayseh** (Chair)
PhD, Vibration, Institute of Sound and Vibration Research, University of Southampton, United Kingdom, 2004
- Biodynamic responses to vibration
- Seating Dynamics
- Postural Stability

**Prof. Khalil Abdelmawgoud** (Assistant Dean for Graduate Studies)
PhD, Powder Metallurgy Institute, Central South University, Changsha, P. R China
- Nanomaterials and its applications in Energy, Water Desalination and biomedical applications
- Nanofibers
- Sintering
- Powder Metallurgy/ Mechanical Alloying technique

**Prof. Tahar Laoui**
PhD, University of Washington, Seattle, Washington, USA, 1990
- Membranes for water treatment & water desalination applications
- Nanotechnology: processing of advanced materials/ nanomaterials/ nanocomposites by Powder Metallurgy/ Mechanical Alloying technique
- Structure-property-processing relationships in composite materials
- Advanced materials for cutting/drilling applications
- Rapid Prototyping & Rapid Manufacturing technologies

**Prof. Muataz Ali Atieh**
PhD, Chemical Engineering, University Putra Malaysia, Malaysia, 2005
- Nanotechnology
- Nanomaterials
- Nanofluids and Environmental Nanotechnology
- Membrane, Water Treatment and Desalination
- Renewable Energy, CVD

**Prof. Mohd Sobri Takriff**
PhD - Chemical Engineering, University of Arkansas, USA, 1996
- Wastewater treatment
- Water Reuse and Recycle
- Desalination Brine Management
- Renewable Energy
**Areas of Expertise of Faculty and Staff Members**

**Dr. Syarif Junaidi**
PhD, Material Physics and Chemistry, Kyushu University, Japan, 2003
- Alloy design and Material processing
- Microstructure characterization and Physical Metallurgy
- Corrosion of Materials
- Molecular Dynamics
- Biomaterials

**Dr. Khalid Ramadan**
PhD, Mechanical Engineering, University of Iowa, Iowa, USA, 2002
- Computational Thermal Science
- Micro-flows
- Micro-scale heat transfer
- Convective heat transfer

**Dr. Muhammad Zubair**
PhD, Nuclear Energy Science and Engineering Harbin Engineering, University, Harbin, China, 2011
- Safety and reliability of nuclear power plants
- Nuclear reactor instrumentation and control system
- Probabilistic safety Assessment, Living Probabilistic PSA, Risk monitoring.
- Human-machine interface
- Radiation Detection and Measurement
- Nuclear Security and Safeguards

**Dr. Iyad Al Qasir**
PhD, Nuclear Engineering, North Carolina State University- Raleigh, NC, 2007
- First-Principles Calculations
- Thermal Neutron Scattering
- Radiation damage and effects

**Dr. Mohammad Ahmad Qasim Al-Shabi**
PhD, Mechanical Engineering/Mechatronics from McMaster University Canada, 2011
- Control
- Estimation
- Artificial Intelligent
- Image Processing
- Machine Vision
- Robotics and Unmanned Vehicle

**Dr. Mohammed Kamil**
PhD, Mechanical Engineering, University Malaysia Pahang, Malaysia, 2011
- Hydrogen Fuel
- Alternative fuels
- Alternative Energies
- Refrigeration and Air-conditioning
- Fluid flow and Computational Fluid Dynamics
- Heat transfer and Power Generation Plants
Areas of Expertise of Faculty and Staff Members

Dr. Bassam Abdullah Khuwaileh  
PhD, Nuclear Engineering, North Carolina State University, USA, 2015  
- Uncertainty/sensitivity and model calibration  
- Experimental validation and model verification  
- Computational reactor physics and thermal hydraulics  
- Surrogate modelling and complexity reduction

Dr. Hussien Ali Hussien  
PhD, Mechanical Engineering, University of Illinois at Chicago, Chicago Illinois USA, 1998  
- Modelling and Simulation of Multibody Systems Dynamics applications  
- Computer-aided Design  
- Computer Integrated Design  
- Automotive design and product development  
- Green energy machineries (Electric Vehicles)
Areas of Expertise of Faculty and Staff Members

Sustainable and Renewable Energy Engineering department

Prof. Ibrahim I. El-Sharkawy (Chair)
Ph.D., Energy and Environmental Engineering, Kyushu University, Japan, 2006
- Solar cooling systems
- Solar-powered multigeneration systems
- Thermal energy storage using adsorption technology
- Atmospheric water harvesting
- Solar systems for energy-efficient housing

Prof. Abdul Ghani Olabi (Director of the Sustainable Energy And Power Systems Research Centre)
Ph.D., Mechanical Engineering, Dublin City University, Ireland, 1993
- Hydrogen and Fuel Cells
- Solar Energy
- Sustainable and Renewable Energy
- Circular Economy
- Materials Science and Smart Materials

Prof. Abdul Hai Al-Alami
Ph.D., Mechanical Engineering, Queen’s University of Kingston, Ontario, Canada, 2006
- Mechanical energy storage
- Compressed Air energy storage
- Materials for third generation photovoltaics

Prof. Mohammad Ali Abdelkareem
Ph.D, Fuel cells, Gunma University, Japan, 2008
- Development of nanosized catalyst
- Urea fuel cells, microbial & solid oxide fuel cell, application of the nanosized materials in the Hydrogen release
- Development of an integrated system for electricity production from biogas and solid oxide fuelcell

Prof. Mamdouh Assad
Ph.D, Mechanical Engineering, Helsinki University of Technology, Helsinki, Finland, 1998
- Renewable energy
- Energy efficiency
- Energy and exergy analysis
- Evaporative cooling, energy conversion systems and industrial ventilation
Areas of Expertise of Faculty and Staff Members

Dr. Chaouki Ghenai (Chairman: Research Funding Department, Office of Vice Chancellor of Research and Graduate Studies)
PhD, Mechanical Engineering (Energy-Combustion), Orleans University, Orleans, France, 1995
- Energy Efficiency (Building, Industry and Transportation)
- Hybrid Power System
- Micro Grid Power System
- Renewable Energy for Desalination System
- Modeling and Simulation of Energy Systems
- Clean Energy Technologies & Energy Storage
- Nano-fluids for Biofuels and Energy Systems

Dr. Basharia Yousef
PhD, Mechanical Engineering, Department of Mechanical and Manufacture, Faculty of Engineering, University Putra Malaysia, 2007
- Renewable Energy
- Indoor Quality Air
- Thermal Comfort
- Heating Ventilation and Air Conditioning (HVAC)

Dr. Shek Atiqure Rahman
PhD, Energy and Bio-thermal Systems (Thermodynamics), National University of Singapore (NUS)
- Solar energy
- Renewable energy
- Computational fluid dynamics
- Drying, Freeze drying
- Atmospheric freeze drying

Dr. Tareq Salameh
PhD, Energy Sciences, Lund University, Sweden, 2012
- Renewable Energy for Desalination System, Biofuels – Biodiesel, Biogas, Syngas, Bio-oil
- Modeling and Simulation for Energy Systems

Dr. Anis Allagui
PhD, Mechanical Engineering, Concordia University, Montreal, Canada, 2011
- Electrochemical energy storage: electric double-layer capacitors and fractional capacitors, multivalent ion batteries, anomalous relaxation and diffusion, charge transfer;
- Impedance spectroscopy: fractional impedance, random excitations, time-frequency analysis;
- Plasma micro-discharges: nonlinear dynamics, time series, high-speed random bit generation.

Dr. Ammar Alkhalidi
PhD in Mechanical Engineering
- Renewable Energy.
- Water Energy Balance.
- Compressed air and Kinetic Energy Storage system.
- Regulation and legislation for energy systems.
- Micro and Nanofluidic.
Dr. Ahmed Galal Abokhalil
Ph.D, Electrical Engineering Department, Yeungnam University, South Korea, 2003-2007
- Renewable Energy – Wind and PV Power Conversion, Control and Grid Integration;
- High Voltage DC Transmission – Converter Technology, Control and System Stability;
- Microgrids, Mobile and Autonomous Power Systems;
- Modeling and Control of Power Electronic Converters and Systems

Dr. Abrar Inayat
Ph.D, Chemical Engineering, University Technology PETRONAS, Malaysia
- Renewable Energy & Sustainable Energy Systems
- Biomass and Bioenergy
- Process System Engineering
- Production of Biofuels
- Modelling, simulation and optimization of biomass processing technologies
- Process integration
- CO2 capture and utilization
- Heat integration
- Energy Management
- Hybrid Energy Systems

Dr. Muhammad Tawalbeh
Ph.D, Chemical and Biological Engineering, University of Ottawa, Ottawa, Ontario, Canada, 2013
- Membranes for fuel cells
- Membranes for CO2 separation and capture
- Adsorption processes for gas separation and wastewater treatment
- Modeling and simulation of renewable energy systems
- Nanomaterials for energy storage systems
- Renewable energy for sustainable desalination
- Modeling and simulation of membrane separation and adsorption processes

Dr. Zafar Said
Ph.D, Mechanical Engineering, University Malaya, Malaysia, 2014
- Phase Change Materials (Nano-Enhanced PCM and Nano-Encapsulation PCM)
- Battery Thermal Management
- Energy Engineering and Power Technology
- Minimum Quality Lubrication (MQL, CMQL)
- Energy Storage
- Economic and Environmental Impact

Dr. Ahmed Hachicha
Ph.D, Thermal Engineering, Polytechnic University of Catalonia UPC, Barcelona, Spain, 2013
- Renewable/Solar energy systems and its applications
- Concentrating solar power technologies
- Numerical modeling and Computational fluid Dynamics
- Combined PV thermal systems
- Thermo-fluid analysis of energy systems
- Dust effect on solar systems
- Energy efficiency

Dr. Di Zhang
Ph.D, Electrical and Electronic Engineering, University of Hong Kong, Hong Kong, 2014
- Third-generation photovoltaic and optoelectronic devices (dye-sensitized/organic/perovskite solar cells, photodetectors, LEDs)
- Surface-enhanced Raman scattering (SERS) sensing
- Plasmonic nanomaterials & nanostructures (metal nanoparticles, nano prisms, nanowires)
- Carbon-based nanomaterials (graphene, carbon nanofibers)
Areas of Expertise of Faculty and Staff Members

Dr. Ali Mohammed Hassan Radwan
PhD in Energy resource engineering at Egypt-Japan University of science and technology (E-JUST), Egypt, 2018
• Computational fluid dynamics simulation of thermal applications.
• Concentrator photovoltaics.
• Thermal management for high heat flux surfaces.
• Energy efficient buildings.

Dr. Ahmed Al Makky
PhD in Engineering and Computing, University of the West of Scotland, Glasgow, United Kingdom, 2016
• PEM Fuel Cell & Electrolyzer CAD Design and Design Calculations.
• CFD Turbulence Modeling in the Field of Electric Car Body Shape Optimization.
• Design of 3 [MW] wind Turbines.
• Hydrogen Fuel Internal Combustion Engines Design.
• Design of New Flywheel Technologies.
• Battery and Supercapacitor Electrochemistry Modelling.
Areas of Expertise of Faculty and Staff Members

Staff Expertise

Dean Office

Alaa M. Ubaid
B.Sc., & M.Sc. UoT-Iraq. Ph.D. In Engineering Management, University of Sharjah, UAE, 2021
1. Engineering management
2. Sustainable manufacturing systems.
3. Industry 4.0.
4. Innovation Management.
5. Organizational Excellence
6. Optimization

Rola Jamal
B.Sc, Computer Engineering, University of Sharjah, U.A.E, 2012
1. Hardware: configuration and troubleshooting different components for computers & printers
2. Software configuration and testing. Fixing software & firmware errors
3. Setting up and maintaining both software and hardware connections
4. Expert in usage of windows and Linux systems and all their components and tools
5. Web design and web application development
6. SharePoint web content editor
7. Programming and coding: C++, C#, Python, HTML, CSS, PHP, JavaScript, JQuery, SQL
8. Basic usage of creative design software: Adobe Photoshop, InDesign & AdobeXD
9. AI and Data Mining

Samia Ahmed Alyassi
MBA, Edinburgh Business School, Heriot-Watt University, 2022
1. Versatile and innovative Employee with extensive experience in office management
2. Team Leadership & Staff Motivation skills
3. Decision-making and problem-solving skills
4. Customer service & Client relationship skills
5. Detail & result-oriented

Sumayah Al Jaede
1. Handling the incoming & Outgoing Mail for the Dean & Vice Dean, answering the incoming phone call, prepare meeting for the Vice Dean
2. Preparing memo for all Departments in the University and other Colleges
3. Compliance with the request (purchase order) issued by the College to various departments (Central Lab, Procurements, and IT)
4. Process the Leave request and permission leave for all the Staff in the College
5. Contact and organize for any event for the students

Mariam Yousif Alhammadi
BSc, Industrial Engineering & Engineering Management, University of Sharjah, UAE, 2021
1. Good communication & teamwork
2. Prioritization, effective planning & organization
3. Working on Accreditation documentation
4. User of SQL/C++ Programming languages, MATLAB, Arena Software & MS Office
5. Critical thinking & working towards effective solutions
### Areas of Expertise of Faculty and Staff Members

**Latifa Mohamed**  
B.Sc., Arts in International Relations, University of Sharjah, UAE, 2021  
1. Good communication skills and team work.  
2. Reliable, organized and confident to work independently and efficiently under pressure.  
3. Engaged in discussion on business topics.  
4. The ability to build successful social relationships.  
5. Possesses strong interpersonal and presentation skills

**Assiya Labib**  
BSc, Industrial Engineering & Engineering Management, University of Sharjah, UAE, 2021  
1. Quality Control, Analysis, and Improvement.  
2. Good experience in Quality Control, Efficiency Optimization, and Organizational Effectiveness.  
3. Good Experience in Course and Program e-files using Taskstream, to ensure compliance with the Principles of Accreditation of (CAA) and other international accreditation agencies.  
4. Excellent skills in MS Office, Graphic Design (Adobe Photoshop & Illustrator), Good skills in ARENA Simulation, AutoCAD, C++, SQL.  
5. Analytical skills, Teamwork, Adaptability, Flexibility, Problem-Solving, Creativity, Innovation, Attention to detail.

**Architectural Engineering**

**Fatima Mousa Khader**  
1. Excellent written and verbal communication skills including drafting letters, emails, taking minutes of meetings, updating calendars and contact database, as well as communicating with internal and external people  
2. Effective management including budget-related activities, organization, and prioritization functions within the office  
3. Expert in using software applications including Word, Excel, PowerPoint, Banner, and internet search  
4. Expert in translating from English to Arabic and Arabic to English

**Lamees Hamid**  
1. Master’s in urban planning with interest in Environmental Issues and Sustainable Development Goals  
2. Architect with good portfolio of residential and commercial projects  
3. Teaching some architectural engineering courses such as Architectural Design V, Computer-Aided Architectural Design, Building Construction Labs  
4. Assisting in Design Studios and support students in concept generation and design development  
5. Software skills: Revit, AutoCAD, 3Ds Max, Sketchup, Rhinoceros & Grasshopper, GIS  

**Farah M. Alani**  
1. Architect, good design skills  
2. Good experience in industry, worked with subcontractor & consultants  
3. Teaching in various courses such as construction lab & Computer Aided Design lab  
4. Teaching assistant for design courses & Drawing I course  
5. Good experience in Engineering drawings programs (AutoCAD , Revit , 3DMax & Sketch up )  
6. Good experience in Graphic Design Programs (Adobe Photoshop , Adobe Illustrator , & Adobe Lightroom )

**Osama Adel Hassan**  
1. Architectural Engineering Design Experience, specialty in Modular Design and Prefabrication construction  
2. Extensive experience in 3D printing and CNC laser Technologies  
3. Extensive experience in 3D modeling Softwares and technology in general  
4. Teaching Assistance experience on Level 0, 1 and 2 in Architectural design  
5. Experience in Construction & Project management and Building information modeling BIM

**Gene Anthony Soriano**  
1. Computer Science with 2D & 3D Architecture Modelling Training and Experience  
2. Layout and designing of posters and other printing materials using the latest software (e.g. Photoshop, Illustrator, InDesign,Coreldraw, etc.)  
3. 2D & 3D Architecture Design (Sketchup, Lumion, AutoCAD and Revit)  
4. Architecture Printing and Equipment (Plotters, 3D Printer and Laser Cutter)  
5. Offset Printing (Large Format Posters, Roll-up Banner, Offset Lithography and use of Imposition Software like Creo Preps)  
6. Hardware and Software Troubleshooting, Management and Administration  
7. MS Office and any Computer Software for everyday application
Areas of Expertise of Faculty and Staff Members

**Electrical Engineering**

**Nour Ali Kousa**  
MSc in Electrical Engineering, American University of Sharjah, 2015

**Admin skills**
1. Extensive experience in Accreditation reports, course files, and related statistics
2. Extensive experience in Scheduling and faculty load distribution
3. Expertise in website content editing
4. Excellent knowledge of using Argos, banner system, blackboard, and Taskstream
5. Experience in Microsoft Excel, Access, and Microsoft Visio
6. Knowledge in budget preparation and control and strategic planning
7. Student advising
8. Soft skills: Excellent Communication skills, Self-learning, team working, and time management skills

**Technical skills:**
1. Researcher in the area of telecommunication engineering
2. Programming using Mat lab, PSPICE
3. Conducting lab experiments in the area of electrical
telecommunication engineering

**Reem Mohamed Ahmed**  
MBA in General Management, Canadian University, 2020

1. Human Resources Management knowledge and skills
2. Group Working, to help the work in the department to go smooth
3. Computer and software skills (Microsoft and Adobe)
4. Dealing with students to solve the issues related to the advisor and exams
5. Using Banner and Argos system
6. Organizing and management skills
7. Archiving system
8. Managing the events in the department
9. Flexibility in working with others

**Obaida Ali Abu Bader**  

1. LabVIEW programming and NI hardware (Data Acquisition, RoboRIO and CompactRIO)
2. Measurement, instrumentation and transducers
3. PLC S7-200 hardware and ladder programming
4. Microcontroller and embedded system Design
5. MATLAB programming

**Imtinan B. Attili**

1. Teaching electrical engineering laboratories varying from freshmen level labs to senior level labs
2. Using software such as MATLAB, CADENCE, PSPICE, Visual Basic, Quarts, LabView.... etc. to perform different experiments
3. Researcher in the area of analog circuits and systematic literature review (SLR) with a number of publications
4. Preparing course and lab schedules for coming semesters and coordinating with the registration department. In addition to other admin work
5. Testing, debugging and calibrating new equipment and trainers needed for conducting experiments

**Mohammad Saad Suleiman**

1. Micro-grid operation and control
2. Power electronics circuits design and implementation
3. Printed circuit boards (PCB) design
4. Lighting control systems testing and commissioning (From my prev. work)

**Noor Ul Misbah Khanum**

1. Excellent skills in a variety of software programs including Lab-View, SPICE, Circuit Maker and L-EDIT
2. Very good knowledge of programming languages like C, C++ and MATLAB
3. Proficiency in teaching and mentoring labs in the Electronics and Computer Engineering field
4. The ability to test software and hardware circuits to determine its functionality, correctness and completeness
5. Capability of caring about the needs of students and ensuring that they receive the best possible education, learning environment and resources in the lab to thrive, grow and reach their full potentials
**Areas of Expertise of Faculty and Staff Members**

**Sol Andrew C. Domingo**
1. Extensive experience in maintenance, testing commissioning of various Telecom Power Plant equipment such as Rectifier, Power Generator, UPS, Solar Controller, Batteries, Transformer
2. Experience is Electrical Building Design, Electrical Plans, Specifications and Electrical Cost Estimates
3. Testing and commissioning of various electrical lab equipment such as Oscilloscope, Function generator, Power Supply, Transformer, Motors
4. DC and AC Circuits analysis, Electromechanical circuit analysis, Three Phase Power System Analysis
5. Supervised the electrical contractors on the scheduling and completion of all contracted electrical works
6. Knowledge of AutoCAD

**Civil & Environmental Engineering**

**Hala Hussein**
1. Licensed lawyer with License-inLaw
2. Experienced in Federal Law of Egypt
3. Supervision of professional digital filing system
4. Event planner and accreditation/conferences coordinator and expert in software and bespoke packages (eg Microsoft Office, Banner)
5. Soft skills such as good communication, service and relationship-building skills, Team working skills, Organization and time management skills, Negotiation skills, Tact, discretion and diplomacy. The ability to be proactive and use initiative: to see what needs doing and to do it

**Moh’d Qaisieh**

![Photo of Moh’d Qaisieh]

BSc. Civil Engineering, Substructures & Transportation, Nish university, 1987
1. Over 10 years’ experience in different civil Engg. Disciplines (Consultation, contracting- Construction & materialtesting)
2. In the scope of Quality Control and Quality assurance.: Holder of ISO 9000 certificate from Berau Veritas International BVQI, worked as Quality Manager / Auditor
3. Expert in Civil Engg. Materials Testing (Soil, Rock & Concrete piles)
4. Expert in Geotechnical Investigation (field exploration) as well as concrete piles investigation (piles integrity testing)
5. Over 20 years’ experience in the education field (UOS) by dealing with students in terms of soil testing, evaluating student’s work (reports), invigilation, etc.

**Nabila Al Hawawini**
1. Expert in Concrete Technology of Fresh and Hardened Concrete Testing (using an advanced compression machine controlled by BC100 and UTC-4940 software)
2. Extensive experience in Basic Materials Testing including: Cement, Aggregates and Reinforcing Steel Bars. (Tensile strength test using the Universal Testing Machine, controlled by DION 7 Software)
3. Extensive experience in NDT (Non-Destructive Testing) for concrete using advanced Equipment with software and data acquisition devices such as: HammerLin, PunditLink and Canin Provista
4. Extensive experience in teaching and supervising lab sessions with excellent organization and time management skills (managing students’ various activities such as Concrete Cube Competition for the Materials Course Project and field trips in every semester)
5. Reliable, meticulous and analytical of all details to ensure the smooth running of lab work

**Priya Kaimal**
1. Experience in land surveying using Auto level, Theodolite, Total station and the related software Civil 3D for surface profile and profile views
2. Experience in Global Positioning System (GPS) and data collection
3. Experience in hydraulic bench equipment in Fluid mechanics - Vortex, Bernoulli and Reynolds apparatus, Impact of Jet and head losses in pipes
4. Computer skills in structural design related software
5. Experience in lecturing different courses in Civil Engineering, prepared lesson plans and course works

**Ahmed Shweiki**

**Managerial skills**
1. Iso9001 quality management system Lead auditor certified
2. Iso14001 environmental (environmental management system auditor)
3. Ochs18000 (occupational health and safety auditor)
4. Iso17025 quality system for laboratory testing auditor
5. Worked with EFQM

**Technical skills**
1. Computer and testing machines operating and trouble shooting
2. Computer to machine connectivity and wiring
3. Sensor wiring and calibration to data acquisition devices or PC or microcontrollers
4. IoT Internet of things installation and Use for all devices
5. Drone operating and photo and video capture
6. Video and image processing and editing
### Areas of Expertise of Faculty and Staff Members

7. 3D modelling and design
8. Craftsmanship and handyman in tools and hardware
9. 3D printing
10. Digital video recording systems connection and installation
11. Computer network installation and configuration
12. Ability to self-learn
13. Arduino and raspberry Pi utilization and system building

**Software skill**

- AutoCAD - Sketchup - 3d max - Unity - MATLAB - Fusion360 - Ansys2018 structure - 3dzypher (photogrammetry) - Excel and office - Photoshop and other image editing software - Blinder - Video editing software - Plus a lot of other testing machine software - Video surveillance software

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### Tarek Alhomsi
MSc, Civil Engineering, University of Sharjah, UAE, 2018

1. Experience in structural concrete design consultancy, with using many different structural design softwares such as ETABS, STAAD Pro, Procon and SAP, with capability of Problem-Solving.
2. Experience in High-Rise Buildings construction with contracting companies, and construction site management for fast-track projects with high performance.
3. Experience in Fluid Mechanics Laboratory equipment, apparatus, and tools, with capability to fix, run and control any experiment to meet the expectations, and to deliver the applications and knowledge to the students.
4. Experience in Camera and Video shooting, Editing, and manipulation and arrangement of video shots.
5. Experience in AutoCAD drawings, designs and detailing.
6. Working in videos implementations and editors, Ability to self-learning any science and engineering application.

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### Loubna Chaabi
Masters in environmental sciences, IBN T0FAIL University, Morocco, 2006

1. Advanced skills in water analysis and all other related samples; using advanced analytical instrument including but not limited to: ICP, GC, TOC, IC, TGA, the ultimate analysis device .... etc., and all related software
2. Advanced skills in designing and improving procedures, experiments and projects setups, to accommodate all requirement of faculty members and students based on new methods and technologies
3. Able to lecture in all topics of Environmental Engineering and Biological Science lectured in two subjects (Solid waste Management & Air pollution) in the Community College several times for evening classes...

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### Anas Cherkaoui
MSc, Civil Engineering, University of Sharjah, UAE, 2018

1. Experience in technical coordination and resolving technical issues in the construction.
2. Six years of experience in the construction industry (buildings) in highly complex structures.
3. Experienced in Building Information Modeling (BIM) and especially clash detections.
4. Great teaching skills.
5. Ongoing practice and development of soft skills related to self-development and psychological counseling.
6. Strong safety knowledge in construction with a certificate of training in International Management Programme Leading Safely (Module 4).

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### Keezhilath Madhu

1. Testing proficiency in all Civil Engineering Construction Materials such as Concrete, Soil, Asphalt, Steel, Thermal Insulations, Water Proofing Membranes and Finished Industrial Construction related Products
2. Expertise to conduct Civil Engineering Laboratories on the basis of National and International Codes, Specifications and Practices. (ASTM, BS, DIN, UEAtc....etc)
3. Knowledge of techniques and tools involved in Testing, Calibrating and QA/QC Procedures
4. Execute all other related duties (such as Inventory Control of the equipment’s, Making of new report forms and work sheets ...etc.) assigned by the Superiors and the Faculty
5. Knowledge of Advanced Equipment’s such as Scanning Electron Microscope and Energy Dispersive Spectrometer, X-ray Analyzer and Advanced UTM’s using Video Extensometer and Laser Speckle Extensometer, Simultaneous Thermal Analyzer (STA) and Thermal Conductivity Analyzer (Heat Flow and Hot Wire Method), Pile Integrity Tester, Corrosion Analyzer and DNC Router for Sample Preparation
6. Knowledge in Handling Laboratory Safety Procedures

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### Yousif Shakir Hassan
Diploma in building & constructions, Technical Institute - Kirkuk, IRAK, 1986

1. Highly skilled in dealing with all kind of equipment, tools & machines (preparation, operation & maintenance) which used in civil engineering laboratories and workshop
2. Very good experience in construction material testing, preparation such as fresh concrete, cement, aggregates, Destructive and Nondestructive testing of hardened concrete
3. Assisting and preparation & testing in Geo technical lab, such as sieve & hydrometer analysis, atterberg limits, compaction, permeability test
4. Experience in assisting graduate & Research students in their projects and activities in material lab, Geo technical lab and workshop
5. Assisting & preparing in several tests in environmental lab
**Industrial Engineering and Engineering management**

**Fatima Saeed Alkutbi**
1. Advising the students and solve their problems/Issues (academic and administrative tasks.)
2. Follow-up the department requests like: purchase orders, student’s papers, faculty and staff related issues, equipment and Performs other tasks assigned by the Chairperson of the Department
3. Archive and maintain the department and students’ files and Assist the Chairperson in organizing the process of students advising and registration
4. Maintain departmental records including minutes of meetings of departmental council and departmental committees meeting, faculty timetables and semester schedule
5. Coordinate and communicate with the college, departments and other administrative offices regarding matters relevant to the department and outside organizations
6. Department activities coordinator, prioritize work and scheduling appointment

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**Sarah Alkayali**
Bachelor, Electrical Electronics Engineer, University Of Sharjah, UAE, 2018
1. Coordinate between the college faculty, staff, students and other departments in order to ensure the timely and orderly execution of all academic services as per the university policies and procedures.
2. Manage the overall academic operations of the college/department, and provide support to the line manager and relevant college/department committee such as academic accreditation reports and statistics, setting appointments, arranging meetings, participate in committee’s as required and writing minutes of the meetings.
3. Participate in the academic advising process, and complete other advising duties as requested such as track retention, authorize add-drop, etc.
4. Cooperate with college faculty members in order to: prepare class schedule, study plans, accreditation requirements, number of students for each study year, faculty workload forms, final examination invigilation plan, examination attendance and examination report forms.
5. Prepare various databases, reports, analysis and statics when requested by the line manager.
6. Complete any other job related tasks as assigned by line manager within the expected time limit.

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**Amer Yousif**
1. Integrated Systems and Automation
2. Database
3. Simulation
4. Manufacturing Processes
5. Maintenance Management

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**Rasha Adnan Al Jabban**
BSc. in Computer Engineering from UoS and MSc in Engineering Systems Mgt. from AUS
1. Arena Simulation Software for industrial and service systems
2. Database Management, SQL and ERP systems management
3. Minitab, SPSS statistical software, MS Excel, MS Project, MS Access, MS Visio software user and trainer
4. Banner system user with ability to learn advanced operations
5. English, communication skills and students advising skills
6. Advanced formatting skills using MS Word for researches, reports and publishing papers
7. Photoshop and MS Publisher editing and design skills
8. C++, MATLAB, assembly language, PLC programming skills
9. Research Assistant in engineering management, simulation, engineering education and others
10. Creative thinking, problem solving, team leading and soft skills

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**Omar Hassan Omar**
1. Experience in Microsoft Access, a database application, alongside Microsoft Visio
2. Experience in Factory CAD, a Facilities Planning software alongside AutoCAD
3. Experience in Arduino, an open-source microcontroller alongside Industrial Automation: Computer Integrated Manufacturing (CIM), Programmable Logic Control (PLC), CNC Machines and 3D Printers
4. Researcher on the scope of Multi-Criteria Decision Making (MCDM), Tribology and Slip, trip & fall
5. Experience in Ergonomics: Anthropometry, Work Capacity Evaluation, Slip, trip and fall, Coordination Skills Assessment, Motion and Time Study

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**Mechanical & Nuclear Engineering**

**Maha Ahmad Bader**
1. Excellent in Organizing, management & Cooperative with students, faculty and staff
2. Excellent in office work: Holding the petty cash, handling the incoming and out coming mail & calls for the department
3. Professional in using the program: banner to get information that help students and faculty
4. Excellent Arabic & English
5. Excellent Communication & interpersonal skills: professional in Microsoft word
Areas of Expertise of Faculty and Staff Members

Sarah Abdulla Eissa
Master, Business Administration, University of Sharjah, UAE, 2018
1. Event Management
2. Archiving System
3. Work process and flow chart

Abdel Rahman Amarneh
Bachelor of Science in Mechanical Engineering, University of Sharjah, UAE, 2016
1. Material testing (Tensile, Compression, Bending, Hardness, Torsion and Charpy impact tests)
2. Sample preparation (Sectioning, Mounting, Grinding and polishing)
3. Computer Aided Design (CAD) using AutoCAD and Solidworks
4. 3D printing
5. Nanofiber fabrication using electrospinning

Ahmad Qasem Ababneh
1. In-depth knowledge of Gamma spectroscopy with High Purity Germanium detectors
2. Extensive knowledge in running and operating the Pressurized Water Reactor (PWR) simulators
3. Very good experience in Neutron Activation Analysis
4. Good experience in teaching Radiation Detection, Advanced Reactor Fluid Mechanics, Heat transfer and Manufacturing Labs
5. Very good knowledge in Nuclear Safeguards

Osama Taqatqa
MSc, Applied Physics, Al Albayt University, Jordan, 2003
1. Excellent experience in Occupational Health and Safety (Certified, NEBOSH International General Certificate in Occupational Safety and Health-UK) (Certified, NEBOSH International Diploma in Occupational Safety and Health-UK)
2. Excellent experience in Radiation Protection based on the instructions of International Atomic Energy Agency (IAEA), and Federal Authority for Nuclear Regulation (FANR-UAE)
3. Very Good knowledge in Nuclear Security. (Certified Nuclear Security Professional (CNSP) from World Institute of Nuclear Security (WINS-UK))

Samar El-Sayed
MSc., Nuclear and Radiation Engineering, Alexandria University, Egypt, 2017
1. Assessment of natural and artificial radioactivity concentrations for environmental and food samples by using the Gamma-Ray Spectrometry Technique to:
   • Investigate the environmental background radiation level, in purpose to use for radiometric mapping,
   • Determine the amount of change of the natural background activity, and
   • Estimate potential radiological hazards to human health from food consumption
2. Elemental Analysis by Neutron Activation (NAA).
3. Analysis of tritium in water by liquid scintillation system
4. Determining the types of ionizing radiation emitted from an unknown radioactive sample. If the unknown sample is a gamma emitter: the elements in it can be identified and the concentration of these elements evaluated.
5. Test different types of radiation detection systems
6. Preparing, conducting, and teaching several labs such as: The Applied Radiation Measurement, Radiation Detection, Nuclear Physics, Modern Physics and Heat Transfer labs.
7. Tutoring the subjects of "Nuclear Instrumentation & Measurement" and "Physics".

Mohamed Ali
M. Sc. in Chemical Engineering, The Petroleum Institute, Abu Dhabi, UAE
1. Hands on experience in chemical characterization and surface chemistry instruments: Ion chromatography, HPLC, FTIR, CHNS-O analyser, Zeta Potential analyser, particle charge detector and isothermal calorimeter.
2. Well familiar with ESEM, XRD, solid and liquid NMR characterization instruments.
3. Practical experience in high temperature and pressure mechanical properties equipment for API oil well cement such as static gel analyser, compressive strength, fluid loss and rheological behaviour analysers.
4. Process engineering experience in Oil Refining Units includes Naphtha and Gas Oil hydrotreating units, Naphtha Catalytic Reforming (CCR) and Isomerization units (PENEX/MOLEX), sour water, gas treating and sulphur recovery units.
5. Advanced technical experience in high performance coatings specifications and their compliance with local and international standards.
Areas of Expertise of Faculty and Staff Members

Sustainable and Renewable Energy Engineering

Gihan Abdelhady
1. Self-Trained for many software: Adobe Photoshop and Ms Access 2007, ...etc
2. 20 years of Office work: correspondence, communication, events, organizational skills and financial matters
3. Ability to plan work, manage pressure, conflicting demands, and applying instructions
5. Taking responsibilities with confidence and high commitment

Monadhil Alchaderchi
1. Senior lab engineer in a PV system (indoor and outdoor)
2. Senior lab engineer in energy storage as well as good experience in fluid and wind lab
3. Researcher on the scope of optimization of solar panel and energy storage (four published researches)
4. Expert in the photovoltaic panel manufacturing (crystal growth, solar cell manufacturing, assembly and panels insulation), data analysis for solar cell and panel (IV curve and PV curve) and semiconductor (transistor and integrated circuit) manufacturing and assembly
5. Experience in factory management, productivity improvement and ISO application

Rasha Saffarini
1. Extensive environmental consulting experience on a wide range of regional projects including, environmental impact assessment, environmental auditing, environmental master planning and construction environmental management planning for LEED and Estidama rated projects
2. Certified by several international and local professional boards including LEED GA, PIEMA, and CEM.
3. Teaching, demonstrating, and troubleshooting a wide range of fluid mechanics and wind energy systems related experiments. These include hydraulic bench set ups, subsonic wind tunnel experiments, and ANSYS simulation for airfoil flow.
4. Research experience in fields related to renewable energy driven desalination, life cycle assessments (LCAs), and membrane characterization
5. Skilled use of material characterization equipment such contact angle measurements, scanning electron microscopy, and differential scanning calorimetry.

Sondus Al Qudah
2. Supervised Project-based learning (BPL) classes and labs, portfolios evaluation, projects testing, and students follow up
4. Tutoring in different subjects (Physics, Statistics, Fluid mechanics, Thermodynamics, Statics, and Dynamics
5. Industrial experience in equipment warranty, claims submissions, tenders and bidding, and customer service.
7. Excellent knowledge of Energy Management (Certified Energy Manager CEM).