

Mohamed Issam Ahmed Elrefaei

Email: M.Issam@eng.suezuni.edu.eg | Mohammedessam200001@gmail.com

Mobile :01066148245 | LinkedIn: [Mohamed-issam-Ahmed-el-refaei](#)

Current Address: Tawanyat Elqahera ,Faisel, 43518,Suez,Egypt

Permanent Address Manshiat Fawzya, 61691,Magagah, El-Minia, Egypt

Professional Summary

Assistant Lecturer and Ph.D. researcher in Electrical Engineering with 7+ years of experience in academia, research, and industry. Specialized in renewable energy systems, control algorithms, and load frequency control. Published in top-tier journals including IEEE and IET. Certified Career Services Provider (NCDA, USA) and Certified Professional Trainer (AmCham, Egypt), with a strong background in career coaching, employability training, and soft skills development. Proven record in curriculum design, university-industry collaboration, and facilitating national and international training programs.

Education

PhD in Electrical Engineering

Faculty of Engineering, Minia University, Minia, Egypt | 2022 – Expected 2026

Thesis: Advanced Control Algorithms for Grid-Connected Renewable Energy Sources

Master of Science in Electrical Engineering

Faculty of Engineering, Minia University, Minia, Egypt | 2017 – 2020

Thesis: Optimal Load Frequency Control of Multi-Area Interconnected Power Systems with Renewable Energy

Bachelor of Electrical Engineering (Very Good with Honors, GPA: 3.5/4.0, Rank: 2nd)

Faculty of Engineering, Minia University, Minia, Egypt | 2012 – 2017

Graduation Project: *Electrical Distribution Design for a New City* — Grade: Excellent

Experience

Assistant Lecturer

Faculty of Engineering, Suez University, Suez, Egypt | Mar 2023 – Present

- Teach and design over 15 courses for 150+ electrical engineering students annually.
- Consult on faculty electrical engineering projects, including water desalination plant for Al-Nasr Fertilizer Company.

Career Development Specialist

University Center for Career Development, Suez University, Suez, Egypt | Mar 2024 – Present

- Planned English placement tests and participated in recruitment event planning.
- Delivered 20+ workshops on resumes, interviews, entrepreneurship, and job search strategies.
- Increased employability of 300+ students through monthly soft and technical skill trainings.
- Organized Suez University's first career fair, hosting 50+ employers and 2,500+ students.
- Mentored over 1,200 students via personalized coaching and mock interviews.
- Supervised and led volunteer interns.

Assistant Lecturer

Egyptian Korean Faculty of Technological Industry and Energy, Bani Suef Technological University, Bani Suef, Egypt | November 2020 – March 2023

- Designed and taught 15+ courses across renewable energy and mechatronics programs.
- Facilitated internships for 100+ students with leading companies such as Samsung and BEDO.
- Organized industry visits to manufacturing facilities including Angel Yeast Egypt Factory.

Electrical Maintenance Engineer

Cleopatra Cement Company, Minia, Egypt | January 2020 – April 2021

- Resolved 20+ motor faults monthly, ensuring continuous plant operation.
- Executed scheduled maintenance during shutdowns on electrical motor centers.
- Led commissioning of new cement mill stations.

Instructor and Lab Engineer

Vocational Training Station, Ministry of Trade and Industry, Minia, Egypt | September 2018 – January 2020

- Developed electronics courses and facilitated ICDL computer literacy training.
- Awarded Best Employee for 2018–2019.

Electrical Site Engineer

Dlhans Hospital, Contracting Company, Bani Suef, Egypt | October 2017 – April 2018

- Supervised installation teams ensuring compliance with Egyptian electrical codes.
- Prepared daily progress reports and updated as-built drawings.

Courses Taught**Faculty of Engineering, Suez University (2023–2025):**

- Automatic Control I & II
- Electrical Machines II
- Electrical and Electronic Circuits
- Engineering Mathematics IV
- Power Generation
- Digital Logic Circuits
- Electrical Power Systems

Egyptian Korean Faculty of Technological Industry and Energy, Beni Suef Technological University (2020–2023):

- Renewable Energy
- Electrical and Electronics Principles
- Workshop Practices
- Electronic Principles
- Health and Safety

- Electric Circuits
- Applied AC and DC Machines
- Electrical Inspection Processes and Procedures
- Instrumentation and Measurements
- Sensors and Instrumentation
- Power Electronics
- Modelling and Simulation

Certifications

Certified Career Service Provider

National Career Development Association (NCDA), Washington, DC, USA | March 2025 – March 2028

Certified Professional Trainer

American Chamber of Commerce in Egypt, Cairo, Egypt | September 2024

Fundamentals of Digital Transformation

Central Unit of IT Training (CUIT) – Supreme Council of Universities, Cairo, Egypt | October 2020 – September 2025

Publications

Advanced load frequency control in smart grids using optimization techniques for enhanced stability and performance

IET | December 31, 2024

Comprehensive Comparison of the Application of Dynamic Optimization Algorithms for LFC of a Double Area System With the Penetration of Renewable Energy Sources

IEEE | March 23, 2022

Dynamic Optimized Load Frequency Control of Multi-Source Power System Using Jaya Algorithm

SERSC Australia | May 1, 2020

Adaptive Load Frequency Control Based on Dynamic Jaya Optimization Algorithm of Power System with Renewable Energy Integration

IEEE | December 1, 2019

Trainings and Courses

Employability Skills Training (TOT)

Aspire Consulting International, Cairo, Egypt | December 2024

Facilitating Career Development Training (FCD)

University Center for Career Development – The American University in Cairo, Cairo, Egypt | November 2024

Training Program in Anti-Corruption and Governance

National Anti-Corruption Academy, Cairo, Egypt | August 2023

Korea International Cooperation Agency (KOICA) Training Programs (Mechatronics, Engineering Education Accreditation, Pedagogy and Entrepreneurship and Industry-University Cooperation)

Korea University of Technology and Education (KOREATEC) – Beni Suf Technological University, Beni Suf, Egypt | November 2020– August 2022

E-learning Course on the Management of Vocational Training Centres – Advanced

International Labour Organization (ILO), Online | November 2021

Academic Test of English as a Foreign Language (TOEFL equivalent)

Center for Foreign Languages and Translation, Minia, Egypt | July 2020

Score: 613

Research Ethics and Scientific Writing

Faculty and Leadership Development Center (FLDC) – Minia University, Minia, Egypt | July 2020

Research in International Databases and Scientific Reference Management Using EndNote

Information Technology Center – Minia University, Minia, Egypt | June 2020

Statistical Analysis Using SPSS

Information Technology Center – Minia University, Minia, Egypt | June 2020

Volunteering

Manager, Career Path Program

University-Industry Cooperation Center (UICC), Bani Suf Technological University, Bani Suf, Egypt | 2021–2022

- Supported student internships and led soft and technical skills workshops.
- Developed competitions promoting student engagement and practical skills.

Treasurer, IEEE Student Branch

Minia University, Minia, Egypt | 2015–2016

- Managed financial oversight and reporting.

Head of Human Resources Team, IEEE Student Branch

Minia University, Minia, Egypt | 2014–2015

- Led recruitment, volunteer training, and feedback processes.

Extra Activities, Leadership, Conferences & Forums Participation

- **Member, Committee for Developing Distinguished Academic Programs**, Faculty of Engineering, Minia University | December 2024
- **Member, National Bank Committee for Laboratories and Scientific Equipment**, Faculty of Engineering, Suez University | February 2024
- **Member, University Digital Transformation Committee**, Suez University | November 2023
- **Member, SIS Committee**, Faculty of Engineering, Suez University | June 2023
- **Participant, First Intellectual Forum for Faculty and Staff**, New Cairo Technological University, Cairo, Egypt | August 2022
- **Participant, Technological Higher Education Conference: “The Egyptian-Korean Experience”**, Beni Suf Technological University, Beni Suf, Egypt | Jun 2022

- **Participant, First Intellectual Forum for Technological University Students**, Delta Technological University, Menofia, Egypt | May 2022
- **Key Contributor to ABEEK Accreditation** for Mechatronics and IT programs, Minia University | 2022
- **Active Member, University-Industry Collaboration Center (UICC) Entrepreneurship and Career Readiness Initiatives**, Beni Suf Technological University | 2021–2022
- **Organized and Supervised Exams, Entrance Tests, and Summer Training Programs**, Minia University | 2020–2022
- **University Representative, Higher Education and Scientific Research Forum**, Al-Massa Hotel, New Administrative Capital, Egypt | December 2021
- **Speaker on Renewable Energy**, First International Conference on Technological Education, Beni Suf Technological University, Beni Suf, Egypt | July 2021

Skills

Technical Skills:

- Software & Modeling: **MATLAB & Simulink, AutoCAD, Dialux, SketchUp, PVsyst, Revit**
- Simulation & Analysis: **Proteus, Multisim, Circuit Wizard, SPSS, EndNote**
- Automation & Control: **PLC Programming (Siemens S7-300/1200, Mitsubishi), ABB Drives**
- Productivity & Reporting: **Microsoft Office Suite, Digital Transformation Tools (CUIT Certified)**

Training & Facilitation:

- Career Development , Career Services and Employability Training
- Workshop Facilitation (Resume, Interview, Job Search, Entrepreneurship, and Career Planning)
- Curriculum Development (Engineering and Career Readiness)

Languages:

- Arabic (Native),
- English (Proficient – TOEFL equivalent: 613)