

MAHMOUD KORANY ABDELFAATTAH

STEM Curriculum & Educational Technology Specialist

Robotics Education | Curriculum Development | Instructor Development | AI in Education

Kuwait | +965 6991 1190 | m.qurani89@gmail.com | linkedin.com/in/koranitronics

PROFESSIONAL SUMMARY

STEM Curriculum & Educational Technology Specialist with nearly 9 years of experience in robotics education, STEM curriculum development, instructor development, and technology-enabled learning at a national talent-development center in Kuwait. Designed and delivered 200+ STEM, robotics, and programming programs and workshops with 2,000+ participant reach, while developing 200+ educators, trainers, and aspiring instructors. Experienced in adapting curricula, technical content, and hands-on learning activities across LEGO Education / SPIKE, fischertechnik, Arduino, and VEX to different ages, skill levels, and learning objectives. Combines a Mechatronics, Robotics and Automation engineering foundation with professional development in educational technology, AI, and Google education tools.

EDUCATION & LEARNING IMPACT

200+	2,000+	200+	11+
Training Programs & Workshops	Participant Reach	Educators & Trainers Developed	Robotics Competitions Delivered

CORE COMPETENCIES

STEM Curriculum Design	Instructional Design	Robotics Education	Training of Trainers (ToT)	Instructor Development
Educational Technology	AI in Education	Hands-On Learning Design	Program Development	Stakeholder Coordination

PROFESSIONAL EXPERIENCE

Robotics Instructor & Competition Coordinator

Nov 2017 – Present

Sabah Al-Ahmad Center for Giftedness and Creativity (SACGC) | Kuwait

- Design and develop STEM and robotics curricula, technical content, lesson activities, and hands-on learning experiences across LEGO Education / SPIKE, fischertechnik, Arduino, VEX, and other robotics platforms, adapting delivery to age, skill level, and learning objectives.
- Designed and delivered 200+ STEM, robotics, and programming training programs and workshops, generating 2,000+ participant reach across student, educator, and trainer-development initiatives.
- Trained and developed 200+ educators, trainers, and aspiring instructors through Training of Trainers (ToT), instructor-development programs, and hands-on robotics initiatives, including Kuwait Ministry of Education educators and newly graduated trainer candidates.
- Delivered external STEM and robotics learning initiatives through institutional collaborations, including Arduino training at Kuwait University, robotics training activities with KISR, and workshops for teachers from different schools.
- Integrate programming, electronics, engineering design, problem-solving, and robotics into practical project-based learning experiences that connect technical concepts with real-world application.
- Coach and mentor students and competitive robotics teams, using competition preparation as an applied learning environment for design iteration, programming, engineering problem-solving, teamwork, and technical communication.
- Contribute to the full lifecycle of robotics competitions, including challenge design, rules, scoring and judging methodologies, arena development, technical validation, and event-day technical operations.

SELECTED EDUCATION & PROGRAM HIGHLIGHTS

- **Instructor Development:** Developed 200+ educators, trainers, and aspiring instructors through ToT and structured instructor-development initiatives.
- **Institutional Learning Delivery:** Delivered STEM and robotics initiatives involving Kuwait Ministry of Education educators, Kuwait University, KISR, and teachers from different schools.
- **Multi-Platform Curriculum:** Developed learning content and activities using LEGO Education / SPIKE, fischertechnik, Arduino, and VEX for varied learner profiles and technical objectives.
- **Competition-Based Learning:** Coached teams achieving national podium sweeps and Top-10 world rankings, translating competition preparation into structured applied STEM learning.

CURRICULUM & EDTECH CAPABILITIES

Curriculum Development: STEM and robotics learning content, lesson activities, hands-on exercises, technical challenges, and competition-oriented learning programs.

Instructional Adaptation: Content adaptation to learner age, skill level, learning objectives, available platforms, and practical workshop environments.

Instructor Development: Training of Trainers (ToT), trainer development, educator support, technical demonstrations, and hands-on facilitation.

Educational Technology: Google education tools, AI in education, programming platforms, robotics systems, and technology-supported learning experiences.

Applied STEM Learning: Robotics, programming, electronics, engineering design, problem-solving, teamwork, and competition-based learning.

EDUCATION

Bachelor of Mechanical Engineering – Mechatronics, Robotics & Automation

Ain Shams University | 2006 – 2012

EDUCATION & TRAINING CERTIFICATIONS

- Google Certified Educator Level 2 — Google (2026–2029)
- Google Certified Educator Level 1 — Google (2025–2028)
- Gemini Certified Educator — Google (2025–2028)
- Certified International Professional Trainer — ICO Ltd (2019)
- Certified Trainer — American University of Professional Studies (2019)
- fischertechnik Education Certified Trainer (2018)

PROFESSIONAL DEVELOPMENT

- Data Science & Machine Learning (AI) — CLS Learning Solutions (2025)
- PMP® Certification Training Course — Gravity Business Advisory (2025)
- HTML Essential Training — LinkedIn (2020)
- Succeeding in Web Development: Full Stack and Front End — LinkedIn (2020)

TECHNICAL & EDUCATIONAL SKILLS

Robotics & Platforms: LEGO Education / SPIKE, Arduino, VEX Robotics, fischertechnik, Raspberry Pi.

Programming & Engineering: Python, C/C++, embedded systems, electronics, mechatronics, automation, PLC Siemens, CAD/CAM.

Learning & Development: STEM curriculum design, instructional design, Training of Trainers, instructor development, educational technology, mentoring and coaching.

Program & Technology: Program development, stakeholder coordination, technical operations, competition management, AI in Education.

EARLIER ENGINEERING EXPERIENCE

Maintenance Engineer — HEISCO Oil & Gas, Kuwait (2016–2017) | Field Service Engineer — Xerox, Egypt (2015–2016) | Service Engineer — SISCO KSA, Saudi Arabia (2014–2015) | Generator Maintenance Engineer — Military Service, Egypt (2013–2014)

LANGUAGES

Arabic: Native | **English:** B2 / Professional working proficiency