

7.4.1 Local Community Outreach for Energy Efficiency

2023-2024

AASTMT is keen on encouraging local community to learn about importance of energy efficiency and clean energy. This is included in AASTMT energy-related programs and trainings as well as visits, workshops, and seminars in addition to graduation projects that serve objectives of clean sustainable energy.

First: Programs and Trainings

AASTMT has a number of programs and trainings offered by different entities to educate about clean energy as well as energy efficiency and management. This is found in the link below;

<u>Training Courses</u> on AASTMT webpage

1. College of Engineering and Technology

AASTMT College of Engineering and Technology offers energy related programs, courses and summer trainings to undergraduate students to educate them on renewable energy sources as well as energy efficiency and management. Also, it offers a number of energy and environmental Postgraduate Programs (Master of Science and Master of Engineering Degrees).

- Related Postgraduate Programs
 - M.Eng. in Renewable Energy and Environment Engineering
 M.Eng. in Renewable Energy and Environment Engineering on AASTMT webpage
 - M.Sc. in Renewable Energy and Environmental Engineering
 M.Sc. in Renewable Energy and Environmental Engineering on AASTMT webpage
 - M.Sc. in Smart Control Systems for Energy Management
 M.Sc. in Smart Control Systems for Energy Management on AASTMT webpage
- Related Undergraduates Programs and Summer Trainings
 - "Electrical Energy Engineering Program" is an undergraduate energy specified engineering program offered in Smart village campus where its students graduate specialized in fields of renewable energy as well as energy efficiency and management.
 - Electrical Energy Engineering Program on AASTMT webpage
 - "Electrical and Control Engineering Program" is an undergraduate program with one of its concentrations focus on Renewable Energy. <u>Electrical and Control Engineering</u> on AASTMT webpage
 - Also, energy-related summer trainings are offered to undergraduates from different engineering aspects to educate them about renewable energy as well as energy efficiency and management. Examples of these summer trainings are shown in the table below.



Training Overview Summer trainings included a number of **AASTMT** energy-related companies in Egypt with **EGT Academy** Summer Siemens Energy which AASTMT has agreements like 2024/2025 Summer Training Program 2024/2025 summer training in Siemens **Trainings of** Energy from 13-18 Sept. **Electrical** Siemens Energy 2024/2025 Summer Training and Control Electrical and Control Engineering Eng. Dept. Students International training visit for students of the Department of Architecture and Environmental Design at APG Abu (Sept. 2024) Dhabi to attend "Architectural details Internation for Energy Efficiency course" which al Training continued for two weeks to study all to APG, worldwide details and procedures Abu Dhabi taken in architecture to guarantee energy efficiency and reduce energy wastes. **APG Training** 2023/2024 Summer trainings included a number of energy-related Summer companies in Egypt with which AASTMT has agreements 2023/2024 Electrical & Control Dept. 2023/2024 summer trainings Trainings of **Electrical** and Control Eng. Dept. Students A group of master's students from the Maritime Postgraduate Studies Institute at AASTMT attended the International Climate Science Workshop in Berlin. The workshop was part of the Ta'ziz Partnership initiative, which promotes international collaboration in environmental science and climate action challenges. International Climate Science Workshop Nov. 2023 Internation al training in Berlin



2. Energy Research UNIT

The Energy Research Unit at AAST-Abukir campus offers the following Training Courses;

TRAINING COURSES on AASTMT webpage

- 1. Renewable Energy System
- 2. Solar energy
- 3. Practical fundamental solar energy
- 4. Wind Energy System
- 5. Energy Management and Auditing (EMA)
- 6. Building Management system (BMS)

And this is practically explained with the help of the 50kW solar plant station built at the roof of building G at AAST- Abukir campus.

3. AASTMT Productivity and Quality Institute (PQI)

Local and international Energy and Environmental Management Certified Training Courses are offered by PQI. These courses enhance businesses sustainability and reduces an organization's impact on the environment while improving its operating efficiency by controlling its energy consumption which helps in reducing product manufacturing.

Energy and Environmental Management Training Courses-AASTMT PQI on AASTMT webpage

40	Local Training Accredited Certificates	International Training Accredited Certificates
	 Understanding ISO 14001:2015 Course. 	ISO 14001:2015 Environmental Management Systems Auditor/Lead Auditor Course.
	• Documents and Records Preparation for ISO 14001:2015 Requirements Course.	ISO 14001:2015 Environmental Management Systems transition Course.
	• Internal Audit for ISO 14001:2015 Course.	ISO 50001:2011 Energy Management Systems Auditor/Lead Auditor Course.
	 Energy Management Technology Course. 	
	 Energy Management System ISO 50001 Awareness and Internal Audit Course. 	

Second: Visits, Workshops and Seminars

Besides, trainings and programs offered by AASTMT in the fields of energy, AASTMT organizes a large number of visits, workshops and seminars to educate its staff, students and local community on energy efficiency and management as well as renewable energy and emerging clean technologies.

Energy-related Activities on AASTMT webpage



2023/2024 Visits, Workshops and Seminars

10/12/2024

Nuclear energy Symposium AASTMT's El Alamein campus hosted a symposium in collaboration with the Dabaa Nuclear Energy Agency and the Russian Cultural Center, focusing on nuclear energy cooperation and sustainability.

Nuclear Energy Symposium



2/12/2024

Egypt Energy Transition Workshop AASTMT organized a workshop titled: "Towards Egypt's Energy Vision 2030: Egypt's Just Energy Transition: Decarbonization, Electrification, Education, Access" which was attended a number of faculty members from Egyptian colleges and universities, in addition to industry figures, governmental and advisory bodies. This workshop stems from a collaboration between the Faculty of Engineering Technology at AASTMT and the Texas A&M University (USA), specifically the Institute of Energy at Texas A&M.

Egypt Energy Transition Workshop

27/11/2024

Visit to Egypt
Energy &
Firex 2024
Exhibition

AASTMT Electrical and Control Eng. Dept. as well as AASTMT Mechanical Eng. Dept, organized a joint technical student Visit to Egypt Energy & Firex 2024 Exhibition.

<u>Visit to Egypt Energy & Firex 2024</u> <u>Exhibition</u>







25-26/ 11/2024 AASTMT electrical and Control Eng. Dept. organized a technical trip to Siemens Energy Centre in ElAin ElSokhna.

Siemens Energy Visit

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(21/10/2024)

Moving towards the future: Innovations in energy" Symposium AASTMT Energy and Petroleum Logistics Management Department, College of International Transport and Logistics, hosted, Dr. Walid Al-Khadrawi, an expert in the field of hydrogen energy sustainability in the oil and gas sector in Egypt, to present a scientific symposium entitled "Moving towards the future: Innovations in energy".

Innovations in energy" Symposium-2024



(30/7/2024)

Green
Hydrogen
Applications
in the
Maritime
Industry
Workshop

AASTMT Department of Marine and Platform Engineering at the College of Engineering and Technology was pleased to organize the international workshop,

"Green Hydrogen Applications in the Maritime Industry", through collaboration with the University of Genova and the Clean Hydrogen Partnership.

Green Hydrogen Workshop



16/5/2024

Green Economy in Ports Workshop Collaborative Work shop between AASTMT Port Training institute and The British University in Egypt brough together all staff members and participants fromm different Egyptian ports to dicuss sustainability in ports

AASTMT Port Training Institute-Green Economy in Ports Workshop





(3/5/2024)

Uni-Green
Project
Workshops

A 6-day bootcamp was organised at the AASTMT, as an outcome to Uni-Green Projects. In this workshop, participants will learn how to find innovative solutions to mitigate climate change effects locally and turn their ideas into business.

Go-Green Workshop



(21/2/2024)

Visit to Egypt
International
Energy
Exhibition
"EGYPES
2024"

Students of AASTMT Chemical & Petrochemical Engineering department visited " Egypt International Energy Exhibition EGYPES 2024" on the 21st of February 2024

EGYPES Exhibition 2024



(1/1/2024)

Energy
Management
Strategies for
Marine
Application:
HOMER ProRenewable
Energy
Software
Seminar

AASTMT Department of Marine and Platform Engineering at the College of Engineering and Technology announced the holding of a free seminar for graduate students under the title: "Energy Management Strategies for Marine Application: HOMER Pro Renewable Energy Software." It will be delivered by engineer Mayar Nabil Renewable energy and water desalination consultant at the Desert Research Center (Applied Research Center).

Homer Software Seminar





Dec. 2023

A
collaborative
EgyptGermany
workshop on
environment
al science

AASTMT Postgraduate Studies Institute hosted a collaborative Egypt-Germany workshop on meteorology and environmental science at its Abu Qir campus. The event brought together students and professors from Freie Universität Berlin and was supported by DAAD.

Egypt-Germany Workshop in AASTMT



(30 Nov. 2023)

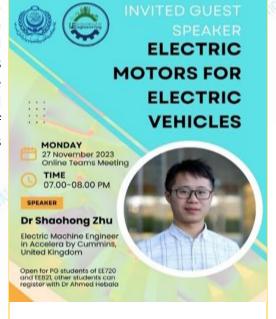
A visit to Siemens Energy Students from the Faculty of Engineering & Technology went on a scientific trip to the Siemens Energy headquarters in Ain Sokhna to link theoretical education with practical/industrial experience, and to better connect graduates with the labour market.

Visit to Siemens Energy



(27/11/2023)

Electric Motors for Electric Vehicles Seminar Presented by Dr. Shaohong Zhu, Electric Machine Engineer in Accelera by Cummins, United Kingdom, this free seminar is prepared for AASTMT graduate students, final year students, and all those interested in the field of motors in electric vehicles towards green and clean energy.





(27/11/2023)

Tesla USA and how to apply for summer training in Tesla USA" Seminar AASTMT hosted Engineer Jalal Salama (Senior Manufacturing Controls Engineer at Tesla, Texas USA and a graduate of the Mechanical Engineering Department at the Academy's main headquarters in Abu Qir) to inform about his experience at Tesla and how to apply for summer training in Tesla US.

<u>Tesla Seminar</u>



Third: Graduation Projects

Annually, a number of departments in colleges of Engineering and Technology, all over AASTMT campuses, witness graduation projects from final year students that serve of renewable energy, carbon reduction, energy management and electric vehicles

Graduation Projects on AASTMT webpage

Examples of these projects are listed below;

Energy-related Graduation Projects in 2024

Department	Project
AASTMT Industry Service Complex	Smart Solar Waste Compactor
AND THAT HOUSELY SELVICE COMPLEX	<u>Solar Agricultural Robot</u>
	<u>The Liquid Tree</u>
	Facility Management Energy Consumption Monitoring and
	<u>Control</u>
Electrical and Control Eng AASTMT Alex.	Implementation of a Cardless Smart Meter
ACTIO	<u>Smart Greenhouse</u>
3 人。	Electrical Installations of a Sustainable Social Hub
THE THE PARTY OF T	Integrating PV and EV Charging Station