

Work force Development Activities in Egypt and the Middle East

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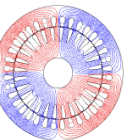
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**NSF/ONR Workshop Building A Robust Workforce in
Electric Power Engineering**

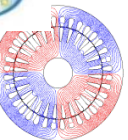
**March 16-17, 2023
Albuquerque, NM**



Status in Egypt and Middle Eastern Universities

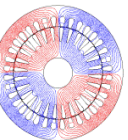
1. There are many public universities in Egypt and an increasing number of private universities around the country.
2. There is increased industrial support from many private companies and the branches of international industry industries in Egypt (ABB, Siemens, GE, etc).
3. There is a significant need in the industry for a skilled workforce, but there's not much to support this demand with how things stand regarding laboratory training. I think the country needs a lot of capacity building.

Egyptian Public Universities



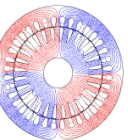
Status in Egypt and Middle Eastern Universities

4. Online activities regarding degree programs or IT capabilities in student homes or work sites are not very common.
5. Many skilled individuals leave the country for overseas opportunities. Many do not return due to economic conditions.
4. There are several national infrastructure projects for roads, bridges, transportation, electrical, etc., but the population is increasing, and many untapped opportunities exist.



7. Some examples of available resources as follows:

- a. National Training Academy <https://nta.eg/ar-plp.html> is created by the Egyptian government. The aim is creating a strong and rich base of youth competencies to be qualified for political, administrative, and community work in the country, by introducing them to the latest management theories. Scientific and practical planning and increasing its ability to apply modern methods to confront the problems surrounding the Egyptian state.
- b. Udacity <https://www.udacity.com/> is a company that specializes in creating the job-ready digital skills that empower achievement.
 - Udacity has a playbook that is globally scalable, addressing the widespread digital talent shortages that impact growth, productivity, and innovation.
 - They collaborate with enterprises and highly motivated individuals to design a tailored talent transformation journey enabled by a special Digital Competency Platform.
 - The content is co-created and continually refined with industry leaders.
 - Each Udacity program is deeply focused—eliminating guesswork in selecting the right course.
 - Expert mentors unblock learning with personalized support and verify complete mastery of competencies.



Egyptian Universities Workforce Training Programs



Technical Workshops/ Seminars/ Trainings from Public/Private sectors. (on-campus)



Technical Courses with Industry-based labs. (on-campus)



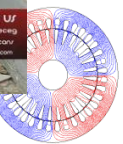
Non-Technical Activities in campus (Soft/Communication Skills) . (In-campus)



Summer Internships in Companies from different sectors. (off-campus)

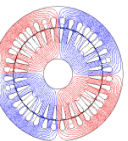


CV writing and Interview management skills workshops. (on-campus)



Egyptian Universities Workforce Development Programs

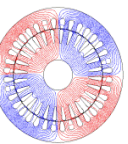
- Technical Workshops/Seminars/Trainings from Public/ Private sectors. (In-campus)
- Announcement for student competitions and winners join internships. (off-campus)
- Organizing Conferences to help graduate students publish their work.
- Organize industrial visits for Hybrid renewables power plants. (off-campus)
- Seminars with software developers like Mathworks
- Bring Vendors to sponsor labs. (in-campus)



SUP'COM

Tunisia, Algeria & Morocco

- Different Activities in-campus and out-campus
- CYBERTHON: Cyber Security and Smart Factory Hackathon
- Technical seminars with Engineering software developers like Mathworks
- Forums like TECHWORLD SECURITY
- Partnerships with funding agencies like DAAD for Automotive Innovation HACKATHON.



2022 V1.0

YBERTHON

BERSECURITY & SMART FAC
HACKATHON

29 - 30 Octobre 2022

CyberPark Monastir Technopôle Neotex

SESSION D'INFORMATIONS
des du DAAD pour des étudiants et
nstants universitaires Tunisiens

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INSAT - Tunisia

- Erasmus +
- Entrepreneurship
- Start Ups
- Model United Nations
- Cyber Security Competition
- Innovations Days



NATIONAL CYBER SECURITY CONGRESS 4.0

PRIZE POOL
10 000 DT

STAY TUNED FOR MORE ANNOUNCEMENTS TO COME

Celebrating Our 20th Anniversary

Vouchers will be revealed soon!

Innovation Days
Northern universities
March, 6th, 2023; INSAT

Innovation is key to boost growth and jobs
To bring together policymakers, researchers, entrepreneurs and experts to debate and shape the future of research and innovation.

Schedule

Time	Activity
08h30-09h00	Registration
09h00-09h10	Welcome, Mrs. Nadia MZOUGHI
09h10-09h25	Official launch of the day, Mr. Moncef BOUKTHIR
09h25-09h40	Status and challenges, Mr. Mourad BELLAÏOUE
09h40-09h55	Industries and innovation, Mr. Omar BOUZOUIDA
10h00-10h30	Inauguration of the new INSAT business incubator
10h30-10h45	Coffee break
10h45-12h30	Workshops, Presidents of Universities
12h30-13h15	Synthesis and Conclusions

Table 1: Timeline of the event

Session 1: Research & Education

Session 2: Administration & Governance

Session 3: Industrial

Law, alienation and innovation

Stimulating new interaction

Registration & Contacts

Towards better knowledge absorption rate

QR code for registration

ANADIEN
JRES

L'ENTREPRENEURIAT
Réconcilier la culture de startup
et l'innovation disruptive

Robert Beauchemin
Président de eConcordia
Président de KnowledgeOne

13H00
Réseautage d'affaires

Venez ré...

Espace B2B entre les fondateurs
des startups, porteurs d'idées et
les hommes d'affaires canadiens
et tunisiens

Startup Support Organization

START'APII

FIRST EDITION

7-10 mars 2023

Siège de l'APII - TUNIS

En partenariat avec **TunisianStartups**

MAPEC

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SIEMENS

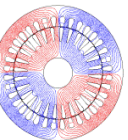
An Example from Bangladesh Universities Workforce Training Activities

- Technical Workshops/Seminars/Trainings from Public/Private sectors. (In-campus)
- Technical Courses with Industry-based labs. (In-campus)
- Non-Technical Activities in campus (Soft/Communication Skills). (In-campus)
- Summer Internships in Companies from different sectors. (off-campus)
- CV writing and Interview management skills workshops. (in-campus)



Prof. Ismael Al-Hinti, President, El Hussain Technical University (HTU), Jordan, commented

- The standard curriculum of the Bachelor Degree program is designed to allow the student to leave after 2.5 years, 3.5 years, or 5 years (including 6-8 months apprenticeship). Each exit point is a re-entry point, and it is linked to a degree (first technical degree, 2nd technical degree, and a Bachelor degree).
- We have recently decided to take another parallel approach where we divided the Bachelor Degree Program vertically into a number of pathways, where each pathway is linked to a specific career role. Each pathway can be ideally completed in 6 months, enabling students to take specific jobs in a much shorter time but with the required specific skillsets.
- On the other hand, we are addressing the need for upskilling and reskilling through a variety of more condensed courses that range from one to three months targeting engineers or technicians who need to change their career path to work in renewables, EVs, energy efficiency, ...etc.



Final Thoughts

- We believe the challenges we are trying to address in this workshop is a global one and we are witnessing similar trends in almost all regions of this world.
- For this reason, we need to rethink the traditional higher education model and to innovate more relevant and feasible approaches similar to the one this workshop is proposing.

