



ARCHITECTURE & ENGINEERING EDUCATION IN THE FOURTH INDUSTRIAL REVOLUTION

26, 27 Mar. 2019

المنظمة
المصرية
للمهندسين
القيادات
المصرية



برعاية دولة الرئيس
السيد سعد الحريري

تشرف نقابة المهندسين
في بيروت - اللجنة العلمية
بدعوتكم إلى مؤتمر بعنوان

التعليم
الهندسي
والمعماري في
زمن الثورة
الصناعية
الرابعة

**ARCHITECTURE
& ENGINEERING
EDUCATION IN
THE FOURTH
INDUSTRIAL
REVOLUTION**

الثلاثاء
والاربعاء ٢٦ و ٢٧ آذار ٢٠١٩
نقابة المهندسين بيروت

لتأكيد الحضور ٠٨١ ٣٨١ / ٠٣



THE KEY OBJECTIVE OF THE CONFERENCE

“Architecture & Engineering Education in the Fourth Industrial Revolution” will shed light on the impact of the fourth industrial revolution on higher education both globally and locally. It will expose ways for rethinking the education of architects and engineers in higher institutions through innovative pedagogical shifts, while reflecting on crucial aspects of self-learning, interdisciplinary thinking, and ethics for the future engineer and architect.



DAY 1: PROGRAM

4:00 - 4:30 pm

REGISTRATION

4:30 - 4:45 pm

OPENING CEREMONY

Wissam Tawil | Head of the Scientific Committee at OEA

Jad Tabet | OEA President

4:45 - 6:10 pm

SESSION I: THE DIGITAL TURN IN HIGHER EDUCATION

4:45 - 5:05 pm

ADVANCED ECOLOGICAL BUILDINGS

Vicente Gualart | Architect and Founder of Institute for Advanced Architecture in Catalonia (IAAC)

5:05 - 5:25 pm

LEARNING DATA ARRIVE AT UNIVERSITY!

Sophie Pene | Professor University Paris Descartes

5:25 - 5:40 pm

BACK TO REALITY: REFLECTIONS ON THE DIGITAL IN ARCHITECTURE

Elie Haddad | Dean School of Architecture & Design - LAU

5:40 - 6:10 pm

PANEL DISCUSSION

Vicente Gualart, Sophie Pene, Elie Haddad | Panelists

Carla Aramouny | Scientific Committee, AUB, Panel Moderator

6:10 - 6:30 pm

COFFEE BREAK

6:30 - 8:05 pm

SESSION II: ARTIFICIAL INTELLIGENCE AND ROBOTICS BETWEEN ARCHITECTURE AND ENGINEERING EDUCATION

6:30 - 6:50 pm

EDUCATING FOR A DIGITAL BUILDING CULTURE

Hannes Mayer | Gramazio Kohler Research Group, ETH Zurich

6:50 - 7:05 pm

ARTIFICIAL INTELLIGENCE IN ARCHITECTURE, URBAN PLANNING AND ENGINEERING

Fadi Geara | Dean of the Faculty of Engineering (ESIB) - USJ

7:05 - 7:20 pm

AI IN ACTION: A 360' TOUR

Mariette Awad | Associate Professor MSFEA - AUB

7:20 - 7:35 pm

EXPLORING TECHNICAL TOOLS IN THE CONTEXT OF ARCHITECTURAL EDUCATION

Ibtihal El Bastawissi | Dean of the Faculty of Architecture, Design and Built Environment - BAU

7:35 - 8:05 pm

PANEL DISCUSSION

Hannes Mayer, Fadi Geara, Mariette Awad, and Ibtihal El Bastawissi | Panelists

Fouad Maroun | Scientific Committee, USJ, Panel Moderator

*Day One's event is partly supported by Erasmus⁺.  Erasmus+

4:30 - 4:50 pm

OPENING TALK

LEBANON CAN STILL MOVE AHEAD OF THE DIGITAL REVOLUTION

Nicolas Sehnaoui | Former Minister of Telecommunications

4:50 - 6:20 pm

SESSION III: EMERGING EDUCATIONAL MODELS

4:50 - 5:10 pm

GENERATION π : FUTURE-PROOFING IN THE NETWORKED AGE

Hani Asfour | Dean of Dubai Institute of Design and Innovation (DIDI)

DAY 2: PROGRAM

5:10 - 5:25 pm

TECHNOLOGY AND TURMOIL: WHAT KIND OF WORLD?

Alan Shihadeh | Dean of the Maroun Semaan Faculty
of Engineering & Architecture - AUB

5:25 - 5:40 pm

STEM FOR ALL TO PREPARE A GENERATION READY FOR THE 4TH
INDUSTRIAL REVOLUTION

Rana Chemaitelly | Entrepreneur and founder of The Little Engineer

5:40 - 6:20 pm

PANEL DISCUSSION

**Nicolas Sehnaoui, Hani Asfour, Alan Shihadeh,
and Rana Chemaitelly** | Panelists

Sara Abou Chakra | Scientific Committee, LU, Panel Moderator

6:20 - 6:40 pm

COFFEE BREAK

6:40 - 8:00 pm

**SESSION IV: PROJECTIONS FOR THE
FUTURE: EDUCATION OF THE FUTURE
ENGINEER / ARCHITECT**

6:40 - 7:00 pm

NEW SKILLS FOR ENGINEERS IN THE 21TH CENTURY

Anne - Marie Jolly | University Professor - CTI (Commission des Titres
d'Ingénieur) - France

7:00 - 7:15 pm

FUTURE EXPECTATIONS OF GRADUATES

Nicolas Rouhana | General Manager IM Capital

7:15 - 7:30 pm

ENGINEERING CLASS OF 2022: EDUCATIONAL TRENDS AND
EMPLOYMENT OPPORTUNITIES

Rodrigue Saab | Chairman of SAAB Research and Development Systems

7:30 - 8:00 pm

PANEL DISCUSSION

**Anne-Marie Jolly, Nicolas Rouhana, Rodrigue Saab, Randa
Jamali (CEO Tumo Beirut)** | Panelists

Chafic Mokbel | Scientific Committee, UOB, Panel Moderator

تنظم نقابة المهندسين في بيروت، في مقرها الرئيسي، سلسلة مؤتمرات مترابطة تتناول مستقبل الهندسة والعمارة وتأثيرها على الإقتصاد في لبنان، وتتوزع كما يأتي:

1. **الثورة الصناعية الرابعة**
The Fourth Industrial Revolution
18 Sept. 2018
2. **المدن الذكية**
Smart Cities
6, 7 Nov. 2018
3. **الذكاء الاصطناعي، الثورة
الرقمية وتأثيرهما في الإقتصاد**
Artificial Intelligence, Digital
Revolution & Impact on the Economy
26, 27 Feb. 2019
4. **التعليم الهندسي والمعماري
في زمن الثورة الصناعية الرابعة**
Architecture & Engineering
Education in the Fourth
Industrial Revolution
26, 27 Mar. 2019

تضيء هذه المؤتمرات على التطور العلمي والتكنولوجي المتسارع ونشوء الثورة الصناعية الرابعة وما يترتب عن ذلك من تأثيرات على مختلف المستويات الفكرية، الإقتصادية، الإدارية، الإجتماعية، إضافة إلى التنظيم المدني، المناهج التعليمية وغيرها.

تهدف سلسلة هذه المؤتمرات إلى إجراء قراءات علمية تحليلية لمستقبل لبنان في ظل هذه التطورات والمتغيرات.