Transforming Models of STEM Education

**Facilitators**: Engineering Design Studio at NYUAD, US Embassy Abu Dhabi, local and regional partner organizations.

# Overview

The **U.S. Embassy Abu Dhabi Public Affairs** team provided a grant to **New York University Abu Dhabi (NYUAD)** to bring together 25 participants from roles within STEM pipelines throughout the **Middle East and North Africa** region (MENA) for a **3-day workshop** with NYUAD’s **Engineering Design Studio** in Abu Dhabi, United Arab Emirates from October 15-17, 2019.

# Background

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# About the program

The program aims to bring together practitioners, academics, and policy makers the MENA region to explore new models of STEM education. By hosting workshop sessions in innovative environments throughout the UAE and showcasing New York University Abu Dhabi’s (NYUAD) Engineering Design Studio as a model space for fostering the next generation of engineers. During the workshop, participants will see how NYUAD has created an innovative, award-winning engineering space that fosters the creative talents and skills of students while also playing a leading role in the community.

# Program Objectives

# Candidate Nomination Criteria

Nominated participants should be individuals actively working to shape and grow STEM pathways within their home organizations. Individuals in positions of strategic oversight and curriculum development.

Nominations will be confirmed based on

# Program Cost Inclusions

Participant airfares, lodging, meals & incidental expenses (M&IE) will be provided. Any required local or regional transportation within the UAE for the program will also be provided.

# Post Recruitment

Each participating post will be asked to provide up to three nominees and one slot for an alternate. Participants will travel to the UAE via Dubai International Airport (DXB) on tourist visas. Assistance with visa issuance will be provided to the best of our abilities; please consult the visa documentation available from Dubai Tourism (https://www.visitdubai.com/en/travel-planning/travel-tools/visa-and-entry-information).

# Notes: The program will be conducted primarily in English. All listed timings are UTC+04. Unless otherwise specified, events are hosted on the NYU Abu Dhabi campus.

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# Travel Coordinated by:

## Nirvana Travel & Tourism LLC Br. 3 (Unit 6B)

## New York University Abu Dhabi Campus

## Saadiyat Island, Abu Dhabi, UAE.

## +971 2 628 7250

## <https://www.ntravel.ae>

# Administrative contact at NYU Abu Dhabi

## Ronak Yadav (ronak.yadav@nyu.edu)

## +971 2 628 5132

# Organizational contact at NYU Abu Dhabi

## Matthew Karau (mkarau@nyu.edu)

## +971 2 628 5131

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Schedule ([Google Calendar](https://calendar.google.com/calendar/embed?src=nyu.edu_6g42smpnr0f14g02utj88f2ld0%40group.calendar.google.com&ctz=Asia%2FDubai))

Monday, October 14, 2019

# Delegates Arrive to Dubai International Airport (DXB). Transfer to hotel in Abu Dhabi.

## **11:00 – 21:00** | Monday, October 14, 2019

## Location: DXB Airport / Abu Dhabi HOTEL (TBD)

# Welcome Reception for Early Arrivals

## **17:30 – 20:00** | Monday, October 14, 2019

## Location: Abu Dhabi Restaurant (TBD)

Tuesday, October 15, 2019 (Day 1)

# Breakfast at Hotel

## **07:00 – 08:00** | Tuesday, October 15, 2019

## Location: **HOTEL, Abu Dhabi (TBD)**

# Bus (Hotel to NYU Abu Dhabi Campus)

## **08:15 – 08:45** | Tuesday, October 15, 2019

## Location: **Abu Dhabi HOTEL (TBD)**

# Arrival to NYUAD Engineering Design Studio

## **08:45 – 09:00** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Workshop Welcome Session, Introductions

## Speakers: Matthew Karau, Dr. Eric Hilgendorf, Tracy Lavin

## **09:00 – 10:00** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Introduction to Engineering Design Studio

## Speaker: Matthew Karau

## **10:00 – 11:00** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Introduction to WeSTEM Student Group

## Speaker: Lama Ahmad, co-president, class of 2019

## **11:00 – 11:30** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# NYUAD Campus Tours (2 Groups)

## **11:30 – 12:45** | Tuesday, October 15, 2019

## Location: NYU Abu Dhabi

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# Lunch at NYUAD Torch Club

## **13:00 – 14:00** | Tuesday, October 15, 2019

## Location: Torch Club, NYU Abu Dhabi

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# Entrepreneurship Presentation

## Speaker: Ramesh Jagannathan

## **14:00 – 14:45** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Student Presentations

## Speaker: NYUAD Students – CHIME

## **15:00 – 15:45** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Break

## **15:45 – 16:00** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Participant Presentations

## Speakers: All Participants

## **16:00 – 16:30** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Guest Presentation (UAEU)

## Speaker: TBD

## **16:00 – 16:30** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Guest Presentation (Sandooq al Watan)

## Speaker: Mohamed Al Qadi

## **16:00 – 16:30** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Summary Session

## **16:30 – 17:00** | Tuesday, October 15, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

# Bus to Dinner

## **17:30 – 18:00** | Tuesday, October 15, 2019

## Location: Welcome Center, NYU Abu Dhabi

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# Dinner in Abu Dhabi

## **18:15 – 20:00** | Tuesday, October 15, 2019

## Location: Al Fanar Restaurant, Yas Mall, Abu Dhabi

## https://www.alfanarrestaurant.com/

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# Bus to Hotel

## **20:00 – 20:30** | Tuesday, October 15, 2019

## Location: Al Fanar Restaurant, Yas Mall, Abu Dhabi

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# Possible Variations

## Visit to Youth Hub at F1 Café on the corniche.

## Visit to Masdar / UAE Space Agency

## Session with Emirates Youth Science Council

## Session with NYUAD Science Librarian

## Session at hub71

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Wednesday, October 16 (Day 2)

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# Bus to Dubai via NYU Abu Dhabi

## **08:00 – 08:30** | Wednesday, October 16, 2019

## Location: Hotel, Abu Dhabi (TBD)

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# Drive to Dubai

## **08:30 – 10:00** | Wednesday, October 16, 2019

## Location: Welcome Center, NYU Abu Dhabi

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# Visit Dubai Future Foundation

## PoC: Noah Rafford / Khalifa Al Qama / PK Gulati

## **10:00 – 11:00** | Wednesday, October 16, 2019

## Location: Emirates Towers, Dubai

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# Visit Techstars Incubator

## PoC: Vijay Tirathrai / Asma Abbas

## **11:00 – 11:30** | Wednesday, October 16, 2019

## Location: Emirates Towers, Dubai

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# Visit Intelak Accelerator

## PoC: Aya Sadder

## **11:30 – 12:00** | Wednesday, October 16, 2019

## Location: Emirates Towers, Dubai

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# Visit Youth Hub

## PoC: Shaikha Al Tamimi / Shamma Al Mazrui

## **12:00 – 12:30** | Wednesday, October 16, 2019

## Location: Emirates Towers, Dubai

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# Visit Dubai Future Academy

## PoC: Maryam Buhumaid / Jessica Bland

## **12:30 – 13:00** | Wednesday, October 16, 2019

## Location: Emirates Towers, Dubai

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# Bus to Dubai Design District (d3)

## **13:00 – 13:30** | Wednesday, October 16, 2019

## Location: Emirates Towers, Dubai

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# Lunch at Dubai Design District (d3)

## **13:00 – 14:00** | Wednesday, October 16, 2019

## Location: Akiba Dori / Yui, Dubai Design District, Dubai

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# Visit Dubai Institute of Design & Innovation (DIDI)

## PoC: Megan Jonk / Leigh Ann Jones

## **14:00 – 14:30** | Wednesday, October 16, 2019

## Location: Dubai Design District, Dubai

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# Visit in5 Design at d3

## PoC: Hernan Hoentsch

## **14:30 – 15:00** | Wednesday, October 16, 2019

## Location: Dubai Design District, Dubai

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# Bus to in5 Technology

## **15:00 – 15:45** | Wednesday, October 16, 2019

## Location: Dubai Design District, Dubai

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# Visit in5 Technology

## PoC: Rekha Septal / Manzor Ahmed

## **15:45 – 16:45** | Wednesday, October 16, 2019

## Location: in5 Technology, Dubai Knowledge Village

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# Bus to Hotel

## **17:00 – 18:30** | Wednesday, October 16, 2019

## Location: in5 Technology, Dubai Knowledge Village

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# Dinner on the Town in AD

## **17:00 – 18:30** | Wednesday, October 16, 2019

## Location: Self-Directed Dining Exploration, Abu Dhabi

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# Possible Variations

## Visit to Mohammed bin Rashid Space Agency

## Visit to AstroLab

## Visit to R-Lab

## Visit Museum of the Future (TBD)

Thursday, October 17, 2019 (Day 3)

# Breakfast at Hotel

## **07:00 – 08:00** | Tuesday, October 17, 2019

## Location: **HOTEL, Abu Dhabi (TBD)**

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# Bus from Hotel to NYU Abu Dhabi Campus

## **08:15 – 08:45** | Tuesday, October 17, 2019

## Location: **Abu Dhabi HOTEL (TBD)**

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# Arrival to NYUAD Engineering Design Studio

## **08:45 – 09:00** | Tuesday, October 17, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

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# Intro Session

## **09:00 – 09:30** | Tuesday, October 17, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

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# Curriculum and Development Tools Discussion

## **09:30 – 10:30** | Tuesday, October 17, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

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# Project / Mentorship Discussion

## **10:30 – 11:30** | Tuesday, October 17, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

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# Innovation Spaces Discussion

## **11:30 – 12:30** | Tuesday, October 17, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

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# Lunch at Torch Club

## **12:30 – 13:30** | Tuesday, October 17, 2019

## Location: Torch Club, NYU Abu Dhabi

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# Design Challenge Briefing / Work

## **13:30 – 15:30** | Tuesday, October 17, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

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# Design Challenge Presentations

## **15:30 – 16:30** | Tuesday, October 17, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

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# Summary & Farewell

## **16:30 – 17:00** | Tuesday, October 17, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

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# Departures

## **19:30 – 23:59** | Tuesday, October 17, 2019

## Location: Engineering Design Studio, NYU Abu Dhabi

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# Possible Variations

## Dinner for Delegates staying the weekend

## Film Screening: General Magic

# Friday, October 18, 2019 (Day 4, Optional)

## Optional: Tours of Abu Dhabi / Dubai

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# Saturday, October 19, 2019 (Day 5, Optional)

## Optional: Tours of Abu Dhabi / Dubai

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# References:

## Books ([library.nyuad.io](http://library.nyuad.io))

## Films (nyuad.io IMDB List)

## YouTube Channels (nyuad.io)

## Podcasts (Worthwhile Content)

## TV Shows ([nyuad.io IMDB List](https://www.imdb.com/list/ls046026568/))

## Courses

## Software

## Hardware

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