# CURRICULUM VITÆ FREDDY MAKHOUL

## Electrical Engineer

## I. Personal Data:

• Full Name: Freddy Fadi MAKHOUL

• Date & Place of Birth: April 13, 1994, Bauchrieh, Lebanon

• Mailing Address: Biakout, Lebanon

• Mobile: (+961) 70 743131 /Email: freddy-makhoul@hotmail.com

#### II. Education:

## Ecole Supérieure d'Ingénieurs de Beyrouth - ESIB, Lebanon

Oct. 2018 - Jun. 2020

Master of Research,

Major: Electrical Engineering

#### Holy Spirit University of Kaslik - USEK, Lebanon

2012 - 2017

Bachelor in Engineering,

Major: Electrical and Electronic Engineering

#### Central College Jounieh - CCJ, Lebanon

1997 - 2012

Lebanese Baccalaureate Major: General Science.

## III. <u>Experience:</u>

# Electrical Design Engineer, **Sakr Power Generation**

Apr. 2019 - Mar. 2020

• Prepare the project planning.

- 1year
- Receive data about the project from Electrical Design Supervisor as per contract.
- Prepare the shop drawing of the panel board.
- Prepare the bill of materials of components needed and generate all needed ERP items.
- Start the design according to specifications and submit the shop drawing and bill of materials to Electrical Design Supervisor for approval.
- Transfer the shop drawing & the part list to Production Department & Production Support Departments after final approval.
- Test the new designed products after production and intervenes for adjusting in case of errors.
- Prepare the software and programs the control module, PLC & M-vision...
- Support the Sales & Sales Support Departments with technical documents & feasibility studies.
- Select, conduct and monitor testing of new components and analyse the test results then generate, check and approve the final report.
- Generate and maintain all standard products lists, documents and calculations forms.

# Electrical Design Engineer, Proquest Engineering & Consulting

Feb. 2018 – Feb. 2019

1 year & 1 month

In collaboration with Bouyges Construction

MEP design projects (Offices, Hospitals, Hotels, Banks and Buildings)

- Design, Calculation (BOM)
- Shop Drawings (Low Voltage, High Voltage, CCTV, Fire System)

#### Final Year Project, USEK

Feb. 2017 – Dec. 2017

Feasibility Study Sponsored by Ecosys ITG Holding on Solar Trackers

11 months

- Design, Calculate, Simulation (PVSyst) & Install commercial sized PV system
- Financial Analysis between Fixed and Tracking Solar System
- Project on Site: https://www.youtube.com/watch?v=dk2zeZTHUeU

Trainee, Mitsulift August 2016

• General introduction (elevator, escalator and revolving doors) 6 weeks

- Training Escalator Maintenance and Communication Skills
- Escalator design, installation and sales department.
- Research: new product line (escalator: cost & energy efficient)
  - new technology for elevators (double deck elevator)

Trainee, Younes Bros June 2016

- General introduction: Generators 6 weeks
- Panel board: Design and installation
- Process control: Concept design and installation
- Testing department

#### Trainee, Debbas Industries S.A.L.

August 2015

Panel boards design and assembly

5 weeks

Panel boards materials and components

#### Trainee, Mazda S.A.L.

January 2015

Multimedia (electronic components and sound system)

2 weeks

Automotive systems (car engine)

#### IV. Seminars

#### **Technical Training**

- DSE (Gen-set Controller)
- Stamford (Alternators)
- DCL international Inc. (Exhaust System)
- EATON (Energy Storage/Micro Grid, Safe Adaptive Evacuation, PXR Digital Switchgear Solutions, UPS Design)

Trauma Healing Camp

9, 10 February 2019

Lira Program 13 organized by the Ministry of Industry -

13, 14 & 16 September 2017

Internal Beirut Energy Forum, Le Royal - Dbayeh

18, 19 September 2017

#### V. Portfolio

President of a youth group, Mariam Apostolic Movement Spiritual, Mental & Physical topics are tackled weekly.

December 2019 – Till present

#### Engineer, Hult International Business School, U.A.E

March 2018

Electric Roads: Innovative idea to install embedded material on Highway to generate electricity from wasted energy

1 week

- Qualified as Top 1 in USEK Competition
- Participate in HultPrize Competition (45 teams from numerous countries)

#### Engineer, Alfa & Ericsson

February 2017

Alfa & Ericsson IoT Competition (Rank: 4th place)

4 weeks

- Design innovative product integrated with Alfa network & Internet of Things
- Topic of my project: Smart Monitoring Electricity Consumption

#### Engineer, Gitex Exhibition, U.A.E

October 2016

Students Lab Competition at World Trade Center Exhibition

1 week

- Participate in GITEX Exhibition (20 teams from numerous countries)
- Topic of my project: Smart Monitoring Parking

Engineer, USEK March 2016

Design and built a prototype container for refugees in Lebanon

1week

Design & Install offline electrical system for the prototype container

#### VI. Special Skills

#### Language:

- Arabic *Native language*,
- French DELF B1,
- English TOFEL ITP Certificate

#### Computer Literacy:

- Word, Excel, PowerPoint, FrontPage.
- AutoCAD, Revit.
- DiaLux, Ecodial, NI-LabVIEW, MatLAB.
- Programming Microcontroller (Assembly Language)

Real Time Operating System – PLC (Ladder, Grafcet, Structure Text)

Operating System - High-level language (JAVA, C/C++)

Field Programmable Gate Arrays - FPGA