

Mohammad Youssef Succar

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Education

American University of Beirut (AUB)

| September 2019 – June 2023

- Bachelor of Engineering in Mechanical Engineering
- Minor in Economics
- Current Cumulative GPA: 4.0/4.0
- Consistently named in the Dean's Honor List
- LAAS (Lebanese Automotive and Aerospace Society) president for the 2022-2023 year
- **Courses Taken:** Vehicle Dynamics & Control, Control Systems, Measurement and Instrumentation, Energy Economics, Mechanical Design, Engineering Sustainability, Hydro, Wind & Solar Power, Introduction to Sustainability

Experience

Research Assistantship - AUB:

| November 2021 - May 2022

- Phase Change Materials (PCM):

Investigating the heat transfer capabilities and thermophysical properties of Coconut Oil as a potential replacement of Octadecane as a phase change material inside buildings. Modeling these phase change materials on COMSOL to try and associate the theoretical with the experimental results.

- Wood Plastic Composites (WPC):

Studying several mechanical properties of wood with and without the addition of recycled and non-recycled fiber composites. Analysis of the properties while varying parameters and testing mechanical properties.

Aviation Internship - Middle East Airlines:

| June 2022 - July 2022

- Training exploring the different fields such as aviation, aerodynamics, safety, engines, fire protection etc. that Middle East Airlines (MEA) engineers, pilots and specialists are all exposed to.
- Tours of the different facilities and departments that are involved in the fields such as the workshops, hangars, and simulators.
- Introduction to maintenance engineers at the facility who handle a range of maintenance tasks from the aircrafts to workshops to the flight simulators.

Building Services Internship - Dar:

| July 2022 - August 2022

- Estimated heating and cooling loads for rooms within a villa using HAP (hourly analysis program) and proposed an equipment layout based on loads and fresh air supply available.
- Applied duct sizing principles on different HVAC units.
- Applied plumbing principles by sizing pipes connected to different plumbing fixtures and implemented the design on Revit.
- Had an overview on LEED (Leadership in energy and environmental design) rating system and the criteria needed for a project to gain LEED certification.

Sustainable Consultancy Internship - ALGENTECHNIK:

| January 2023 – May 2023

- Analyzing the carbon credits and natural gas market in Dubai searching for the optimal strategy for project implementation.
- Performing a sensitivity analysis for different revenue streams of the project variables.
- Developing a technical analysis of the carbon credits sales scheme and emission analysis of the project.

Skills

Languages: Arabic (Native), English (Bilingual proficiency), French (Elementary).

Software: Proficient in Microsoft Word and Excel. Working knowledge in AutoCAD, Creo Pro/E, Autodesk Inventor, ANSYS, MATLAB, SQL, COMSOL, HAP, Revit.

Additional skills: Leadership, Public Speaking, Problem Solving, Data Analysis.

Interests/Hobbies: Automotive Engineering, ThermoFluids, Sustainable Energy, Football, Formula 1, Chess, Volunteering.