

Faculty C.V.

1. **Name**

Fatima M. Badreddine

2. **Academic Rank**

Full-time: Instructional Assistant – Engg Lab

3. **Degrees**

M.Sc. in Electrical Engineering – Lebanese International University, Lebanon (2018 - 2020).

B.Sc. in Electrical Engineering – Lebanese International University, Lebanon (2015 - 2018).

4. **Service at this Institution**

September 2021 - Present: Full-time

March 2021- August 2021: Part-time

5. **Professional Experience**

Instructional Assistant – Engg Lab, American University of Kuwait (Sep. 2021-Present).

Adjunct – Part time teaching assistant, American University of Kuwait (Mar. 2021-Aug. 2021).

Tutor, Training & Engineering Consultants Co., Lebanon (Jul. 2019 – Sep. 2019).

6. **Publications**

- Mohamad, A., Ali, K., Fatima, B., Mohammad, K., Moussa, K., & Rabih, R. (2024). Visually impaired recognition of a fully loaded high and medium voltages electrical network for layout formation and fault monitoring. *Electric Power Systems Research*, 227, 109974.
- Esmaili, S. E., Aldandan, A., Dallol, L., AlDhefeeri, M., AlSalili, O., Badreddine, F., & Hussain, G. (2024). Design and Implementation of a One-Seater Solar Car. *Journal of Sustainable Development of Energy, Water and Environmental Systems*, 12(1), 1120487. <https://doi.org/10.13044/j.sdewes.d12.0487>
- Behiry, A., Imdoukh, A., AlAteyah, A., Badreddine, F., AlFar, R., & Rezk, A. (2023, May). Towards a Self-managed and Gamified Laboratory Experience in Undergraduate Engineering Education. In *2023 IEEE Global Engineering Education Conference (EDUCON)* (pp. 1-5). IEEE.
- Al-Ajmi, A. M., Thiab, G. A., Hamoudah, F. M., Mahmoud, N. M., Esmaili, S. E., & Badreddine, F. M. (2022, June). Project Averroes: An Effective, Durable, and Consumer-Oriented Solution to the Locomotion Problem in VR Environments. In *2022 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA)* (pp. 1-5). IEEE.

7. **Courses taught**

Academic Courses

- Spring 2024:
 - ELEG270L – Electronics Laboratory, 3 hours per week
 - ELEG310L - Electric Machines Laboratory, 3 hours per week
 - ELEG320L - Signals and Systems Laboratory, 3 hours per week
 - ELEG330L - Power System Analysis Laboratory, 3 hours per week
 - CPEG201L - MATLAB Programming Laboratory, 3 hours per week

- Fall 2023:
 - ELEG270L – Electronics Laboratory, 3 hours per week
 - ELEG310L - Electric Machines Laboratory, 3 hours per week
 - ELEG330L - Power System Analysis Laboratory, 3 hours per week
 - ELEG471L - Power Electronics Laboratory, 3 hours per week
- Summer 2023:
 - CPEG201L - MATLAB Programming Laboratory, 5 hours per week (total weeks: 7)
 - ELEG220L – Electrical Circuits Laboratory, 5 hours per week (total weeks: 7)
 - ELEG301L - Programmable Logic Controller Laboratory, 5 hours per week (total weeks: 7)
 - ELEG310L – Electric Machines Laboratory, 5 hours per week (total weeks: 7)
- Spring 2023:
 - ELEG270L – Electronics Laboratory, 3 hours per week
 - ELEG310L - Electric Machines Laboratory, 3 hours per week
 - ELEG320L - Signals and Systems Laboratory, 3 hours per week
 - ELEG330L - Power System Analysis Laboratory, 3 hours per week
 - CPEG201L - MATLAB Programming Laboratory (Independent study)
- Fall 2022:
 - ELEG220L – Electric Circuits Laboratory, 3 hours per week
 - ELEG270L – Electronics Laboratory, 3 hours per week
 - ELEG310L - Electric Machines Laboratory, 3 hours per week
 - ELEG330L – Power System Analysis Laboratory, 3 hours per week
 - ELEG471L - Power Electronics Laboratory, 3 hours per week
- Summer 2022:
 - CPEG201L - MATLAB Programming Laboratory, 5 hours per week (total weeks: 7)
 - ELEG301L - Programmable Logic Controller Laboratory, 5 hours per week (total weeks: 7)
 - ELEG320L - Signals and Systems Laboratory, (Independent study)
- Spring 2022:
 - ELEG310L - Electric Machines Laboratory, 3 hours per week
 - ELEG320L - Signals and Systems Laboratory, 3 hours per week
 - ELEG330L - Power System Analysis Laboratory, 3 hours per week
 - ELEG471L - Power Electronics Laboratory, 3 hours per week
- Fall 2021:
 - ELEG220L – Electric Circuits Laboratory, 3 hours per week
 - ELEG270L – Electronics Laboratory, 3 hours per week
 - ELEG330L – Power System Analysis Laboratory, 3 hours per week
 - ELEG301L – Programmable Logic Controller Laboratory, 3 hours per week
- Summer 2020:
 - CPEG201L – MATLAB Programming Laboratory, 5 hours per week (total weeks: 9)
 - ELEG310L – Electric Machines Laboratory, 5 hours per week (total weeks: 9)
- Spring 2020:

ELEG310L – Electric Machines Laboratory, 3 hours per week

ELEG330L – Power System Analysis Laboratory, 3 hours per week