



1. Name and Academic rank: Manal K. Fattoum, Assistant Professor, full time at **Beirut Arab University (ABET Accredited)**

2. Education: Degrees, discipline, institution and date:

Ph.D., Communications & Electronics Engineering, Beirut Arab University 2020

M.S., Communications & Electronics Engineering, Beirut Arab University 2010

B.E., Communications & Electronics Engineering, Beirut Arab University, 2003

3. Academic experience

- Beirut Arab University, Assistant Professor, Sept. 2021- present, full time
- Beirut Arab University, Lecturer, Sept. 2013- June 2021, full time
- Abdel Hadi Debs Vocational and Technical Center, Instructor, 2007 – 2013 Full time

4. Non academic experience

N.A

5. Certification or professional Registration

N.A.

6. Current membership in professional organizations

- Member in Order of Engineering Lebanon since 2012
- Member in IEEE

7. Honors and Awards

8. Service activities

- 2023-2024 Student Activities Committee member-Beirut Arab University
- 2021-2022 Security for the Engineering Faculty Council
- 2016-2017 Library Committee member-Beirut Arab University

9. Principal publications and presentations from the last five years:

9.1 Textbook

9.2 Journal Publications

- Manal Fattoum, Hamza Issa, Soubhi Abou Chahine, Ali Almutairi, “Design of Slow Wave Microstrip Patch Antenna Array”, International Journal of Engineering Research and Technology (IJERT), July 2019

9.3 Conference Proceedings



- A. Daher, M. Ayache, H. EL-Halabi, M. K. Fattoum and O. Hajj, "Wireless Healthcare Monitoring System for Heart Diseases Classification using Efficient ECG-Based Wave Modeling and Machine Learning Techniques," 2023 Fifth International Conference on Advances in Computational Tools for Engineering Applications (ACTEA), Zouk Mosbeh, Lebanon, 2023, pp. 19-24, doi: 10.1109/ACTEA58025.2023.10193969.
- Heba EL-Halabi; Manal K. Fattoum; Malek Khatib; "Dual Band Circular Patch Antenna for GPS and WiMAX Applications", 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA), Benghazi, Libya 21-23 May 2023.
- Heba El-Halabi; Hasan Moughnieh; Lynn El Nakouzi; Nabil Harb; Omar Kabbani; Manal K. Fattoum; "Compact Dual Band Branch Line Coupler for Wireless Applications", 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA), Benghazi, Libya 21-23 May 2023.
- Heba El-Halabi, Manal Fattoum" Dual Band Branch-Line Coupler using Stub-Loaded Lines", 6th International Conference on Technology, Engineering and Science (IConTES2022), Antalya, Turkey, November 16-19, 2022

10. Professional development activities in the last five years

- Work Ready Now certificate, workshop Dec. 2021, HECD in collaboration with USAID
- Online instruction Design certificate, workshop Sept. 2022, HECD and FSCJ in collaboration with USAID
- Work Ready Now certificate, course reflection workshop Feb. 2024, HECD in collaboration with USAID