



**RESEARCH PARTISIPATION DR. AHLAM AL- SHARIF**



**"Shifting the Energy Efficiency to a New Level in Jordan: Integrating Ambient Intelligence and Big data in the Built Environment: SEEN Jordan"**

In light of the importance of energy efficiency as a persistent global priority, designing climate-adapted buildings becomes of utmost importance for ensuring energy saving through innovative heating and cooling technologies. Jordan, by merit of its climate and local conditions, provides significant potential for securing indoor comfort by deploying climate-conscious designs.

Dr. Ahlam Sharif, the assistant professor at the Department of Architecture, is representing the Hashemite University in the research program -as a senior researcher/ mentor- entitled: "Shifting the Energy Efficiency to a New Level in Jordan: Integrating Ambient Intelligence and Big data in the Built Environment: SEEN Jordan". The project is aiming at enhancing the level of knowledge and awareness of such crucial concepts, researchers from Jordan and the UK would collaborate in this knowledge sharing project incorporating architects, engineers and decision-makers as leaders of change in building techniques. The program entailed a number of planned workshops for the development of a comprehensive roadmap, integrating Ambient Intelligence and Big data, for supporting climate-conscious designs.

This effort represents the collaboration of the University of Wolver Hampton (UK), Philadelphia University (Jordan) and The Hashemite University, which is awarded grant by Newton Fund, a UK Government initiative funded by the Department of Business, Energy and Industrial Strategy, together with partner funders from Newton Fund countries.



UNIVERSITY OF WOLVERHAMPTON



**RESEARCH PARTISIPATION DR. AHLAM AL- SHARIF**

**"Enhancing energy performance of Jordanian buildings using Building Information modelling enabled Technological and Process Innovations".**

Dr. Ahlam Sharif, the Assistant Professor at Department of Architecture, is representing The Hashemite University in the research program -as a senior researcher/ mentor- entitled "Enhancing energy performance of Jordanian buildings using Building Information modelling enabled Technological and Process Innovations". This initiative comprised a main workshop for upskilling the Jordanian engineers in the field of Energy Modelling using Building Information Modelling (BIM). It emphasizes strategic rethink in the domains of process and production to bridge the skills gap in the use of BIM to support the sustainability and energy efficiency of buildings.

The 4-day workshop focuses on key areas such as environmental, social, and physical sustainability along with the key principles, tools, and standards pertaining to energy simulation. Ultimately, it is hoped to improve research capabilities and provide career opportunities for the participants.

This effort represents the collaboration of the University of Salford (UK), Philadelphia University (Jordan) and The Hashemite University, which is awarded grant by Newton Fund, a UK Government initiative funded by the Department of Business, Energy and Industrial Strategy, together with partner funders from Newton Fund countries.



University of Salford MANCHESTER



**COMMUNITY SERVICE INITIATIVE DR. AHLAM AL- SHARIF**

Stemming from the profound belief of the Hashemite University's role in community service, and in order to ensure the active community involvement through design courses, the landscape design course in the Architectural Engineering department at the faculty of Engineering required students to undertake all the design work for the Zarqa Youth Directorate garden in alignment with the client requirements. This was in response to a query sent to Prof. Fawwaz M. Al-Abed Al-Haq, the president of the Hashemite University by Dr. Omar Al-Ghawiri, the Zarqa youth manager. This project received full support from Dr. Awni Tradat - dean of the faculty of Engineering - and Dr. Ahmad Al-Husban - head of the Architectural Engineering department. The design works were supervised by Dr. Ahlam Sharif and Eng. Qusai Al Khalidi, the instructors of the landscape design course.

The design included seven proposals that adhered to sustainable considerations as well as the responsiveness to environmental issues, contextual (cultural and climatic) forces, landform, plantation, material considerations and potential, functional and aesthetic features and, most importantly, the anticipations and requirements of the client. The selected proposal was presented at the Ministry of Youth on January -2021, in the presence of the Secretary General Dr. Hussein Al-Jubour, by students Mohammad Shoqeir, Aseel Abdallat, and Sajeda Shawish. The design was praised for its creativity, simplicity, and affordability.

