

## **Creating designs inspired by Islamic motifs and applying them by 3D printing**

**Prof. Doha El-Demerdash**

**Professor of clothing design, Faculty of Applied Arts, Helwan University**

[Dr.doh.demer@gmail.com](mailto:Dr.doh.demer@gmail.com)

**Prof. Abdallah Elgamal**

**Professor of clothing design, Faculty of Applied Arts, Helwan University**

**Assist. Lect. Amany Ebrahim Hussein**

**Founder of the School of Fashion Academy**

[amanymelody@gmail.com](mailto:amanymelody@gmail.com)

### **Abstract:**

Islamic art is a very rich source of inspiration and quotes for all kinds, especially fashion design. Fashion design can start in fashion design, which can find in 3D printing the possibility to print complex and outstanding stereoscopic shapes.

Since 3D printing was first introduced, it has been used in many manufacturing industries, from medicine to transportation but has slowly spread among hobbyist computer designers (CAD) who now own and use a 3D printer in their homes. 3D printing is a method of manufacturing where the raw material is applied layer upon layer to make a 3D shape. These objects are made through the digital file that contains the three-dimensional data that is extruded by the printer that can employ a large number of materials and techniques.

This research revolves around reading, analysing and studying 3D printing technology, in addition to studying the heritage of Islamic motifs, analysing their types and shapes, and then making some designs for the possibility of applying them with 3D printing in order to create and introduce new design dimensions and perceptions. Through this study, the fashion design process, the innovation process, and the employment of modern technology Everything that is new and useful.

### **Keywords:**

Futurism , Wearable Technology , 3D Printing , Islamic Patterns