

**Entrepreneurial project for designing and producing glass Tiles****Assist.Prof.Dr. Doaa Hamed Hussein****Assistant Professor, Glass Department, Faculty of Applied Arts, Helwan University,  
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Egypt**[OLA\\_SABAH@a-arts.helwan.edu.eg](mailto:OLA_SABAH@a-arts.helwan.edu.eg)**Abstract**

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Introduction: Glass tiles provide a unique opportunity to combine function, beauty and sustainability in architectural design, which can be used in various applications such as architectural openings, architectural facades, glass partitions and lighting units. This research studies how to transform the idea of designing, producing, and installing glass tiles into a small pilot project, and tests it through a graduation project for students of the Glass Department in the academic year 2022/2023.

Research problem: The need to emphasize the concept of entrepreneurship to the students of the Glass Department, by applying an innovative system for designing and producing glass tiles characterized by transparency and flexibility of design, to meet the growing demand for innovative and environmentally friendly architectural solutions. There is a need for innovative products to increase the competitive capabilities of pioneering projects, such as glass tiles that compete with traditional brick and stone in architecture.

Research goal: Teaching and imparting entrepreneurship skills to students as an added value, by developing and producing innovative glass tiles that push and expand the boundaries of design, meet the needs of architects and designers, and meet the needs of customers with customizable and sustainable designs. Research importance: The importance of this research is that it provides a practical model that can be replicated and competitive and is the beginning of a pioneering project that serves entrepreneurs and the local market, which enriches the field of industry and architecture together. Glass tiles are considered distinct architectural elements that allow abundant natural light to enter spaces, and reduce the need for artificial lighting. This leads to energy savings that contribute to achieving sustainability by reducing the building's carbon footprint.

Research method: analytical – experimental Research hypotheses: - Confirming the concept of entrepreneurship for students in the Glass Department enables them to apply an innovative system for designing and producing glass tiles, which helps in creating a successful pioneering project in this field.

Research limits: - Applying an actual business model that is replicable and competitive in the local market and the beginning of an entrepreneurship project, by piloting and implementing a project to design and produce glass tiles and employing it in the garden of the College of Applied Arts, in the expected time and at the specified costs. Fourth year students must take the Graduation Project 2 course for the academic year 2022/2023.

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## **Keywords**

tiles ،Glass ،Design ،Entrepreneurship