



# Using Technological Capabilities of Jacquard Weaving Machine in Heritage Revival and Fashion Design with Decorative Effects.

## **Submitted by**

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A Thesis Submitted Inpartial Fulfillment of The Requirements for The (M.Sc.) Degree in Home Economics (Textile &Clothes).

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2025 A.D /1446 A.H

### **Summary**

# "Using Technological Capabilities of Jacquard Weaving Machine in Heritage Revival and Fashion Design with Decorative Effects".

In this study, the researcher dealt with five chapters with the introductory chapter of the study, which are as follows:

<u>Introductory chapter:</u> this chapter deals with the subject of the study and the definition of the research, which includes the introduction, the research problem, its objectives and importance, the research assumptions and limits, the research methodology and tools, its special terminology, and previous studies related to the research topic.

# Chapter One: Technological capabilities of jacquard weaving machines and practical methods for jacquard weaving and embroidery.

This chapter deals with the historical development of jacquard weaving machines, types of jacquard devices, how a jacquard weaving machine works, classification of automatic jacquard weaving machines, classification of jacquard weaving machines in terms of cardboard type, jacquard device networks, practical methods for producing jacquard fabrics, textile structures manual and automatic embroidery, embroiderystyles, manual and automatic embroidery stitches, embroidery materials and tools.

# <u>Chapter Two: descriptive and analytical study of models of the artistic heritage</u> of Fayoum Governorate.

this chapter deals with Fayoum name, the history of Fayoum, the geographical location of Fayoum, the eras of Fayoum heritage in terms of the heritage of the ancient Egyptian era, Greco-Roman heritage, Islamic heritage, Coptic heritage and folk heritage, and the artistic analysis of the heritage works used in this study.

## **Chapter Three: The researcher's design experiments**

This chapter deals with the definition of design, the importance of design, types of design, inspiration sources for design, decorative design elements, foundations of decorative design, fashion design, fashion design elements, foundations of fashion design, design experience of the researcher, where the researcher used computer

programs such as digital programs in jacquard and fashion design such as Photoshop "Adobe Photoshop", Illustrator "Adobe Illustrator" and CLO "Clo virtual Design online version", The researcher's design solutions in terms of the researcher's approach to decorative designs inspired by the heritage of Fayoum governorate, five decorative designs were created and The data of these five designs were listed, the initial idea, descriptive analysis and technical analysis of these designs, and also the design solutions of the researcher dealt with eight fashion designs in terms of descriptive analysis and technical analysis of each of these designs.

## **Chapter Four: The applied aspect of designs.**

This chapter deals with the specifications of the Jacquard machine, the specifications of the warp threads, the specifications of the weft threads, the models of the executed Jacquard fabric, which are five models of the Jacquard fabric, and the data of each of these models for the Jacquard fabric was listed separately, the models of the executed clothing product, which are eight fashion designs, and the data of each design was listed separately. The part related to embroidery on the clothing product was also listed and this part was explained in each executed clothing product separately.

## **Chapter Five: The Statistical Study and Discussion of Results.**

This chapter deals with the statistical study, where an arbitration form was designed to determine the validity of the form's items and was arbitrated by seven arbitrators in the field. An arbitration form was designed for clothing products and was arbitrated by fifteen arbitrators. Through the opinions of arbitrators specializing in the field, the contents of this form were emptied into statistics to determine which clothing products most fulfill the hypotheses of this study, this chapter also deals with the results, recommendations, references, and four appendices.

### **Abstract**

Fabrics executed with jacquard machines are considered a type of decorative embossed fabrics that are woven using the jacquard machines, it is also considered one of the most important types of woven fabrics used in the textile industry and the most artistic value due to its functional nature. the idea of this study is to integrate the design implemented with jacquard machines and embroidery design together in fashion design, the art of embroidery is one of the decorative arts that man uses to decorate his clothes and furnishings for thousands of years, The applied product of this study is inspired by heritage art in fayoum in implementation of weaving designs on the jacquard machines and then integrating designs executed with hand embroidery with it, then employ these pieces of textile executed with jacquard and embroidery together in fashion design. Eight fashion designs were implemented using jacquard fabric as part of the structural composition of the garment. This study resulted in the production of fashion designs different from the usual by integrating jacquard fabric and embroidery into fashion design, and producing individual designs by drawing inspiration from the decorative units from the heritage of Fayoum Governorate. Final product of fashion designs (eight models). A survey form was also designed for specialists in this field, and a graphical statistic of these opinions was conducted. To reach the general results and recommendations.

**Key Words:** Jacquard Fabric - Decorative Design - Fashion Design - Embroidery - Heritage of Fayoum Governorate