**TITLE OF DISSERTATION: CENTERED, DOUBLE SPACED**

by

Full Name of the Scholar

Registration Number

Submitted in the partial fulfillment of the requirements for the Degree of

Doctor of Philosophy

in

**ARCHITECTURE**

University of Management and Technology, Lahore.

Name of Research Supervisor

**2023**

**Department Name**

**University of Management & Technology, Lahore**

# **CERTIFICATE OF APPROVAL**

Accepted by the Faculty of School of Architecture and Planning, University of Management and Technology, Lahore in partial fulfillment of the requirements for the degree of PhD in Architecture.

Supervisor

Research Supervisor Name

School of Architecture & Planning, UMT

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External Examine#1 External Examiner#2

Chairperson Department of Architecture Dean School of Architecture & Planning

**2023**

**University of Management & Technology, Lahore**

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# **DECLARATION**

I **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** hereby declare that the matter printed in the thesis titled **“\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_”** is my own work and has not been printed, published and submitted as research work, thesis or publication in any form in any University, Research institution etc. in Pakistan or Abroad.

**Dated: December 00, 2023 Signature of Student**

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I solemnly declare that research work presented in the dissertation titled “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” is solely my research work with no significant contribution from any other person. Small contribution or help wherever taken has been duly acknowledged and the complete dissertation has been written by me.

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Student Name

Dated: December, 00, 2023

# **SIMILARITY REPORT**

# **CERTIFICATE BY SUPERVISOR**

I certify that I have read “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_”by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and that in my opinion this work meets the criteria for approving a dissertation submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree at the University of Management and Technology.

**Research Supervisor Name**

# 

# **ABSTRACT**

This section contains the dissertation abstract, designed as a standalone document for a broad audience. The abstract provides a comprehensive summary of the work, emphasizing the problem statement, theoretical background, methodology, experimentation, and key results. Adhering to the text format of the entire dissertation, this one-page document is structured with paragraphs. References are typically excluded from the abstract.

# 

# **DEDICATION**

First and foremost, my lost backbone who initiated me with the idea of doing a Ph.D. My father \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ who dreamt it and my Mother \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, who pushed me throughout and prayed for me countlessly.

# **ACKNOWLEDGMENT**

Thanks and gratitude are due to Allah for whom this work would not take place except with His will and His support, wishing that it will show among my good deeds in the latter-day.

**Scholar Name**

***PhD (Scholar)***

Department of Architecture

University of Management and Technology, Lahore.

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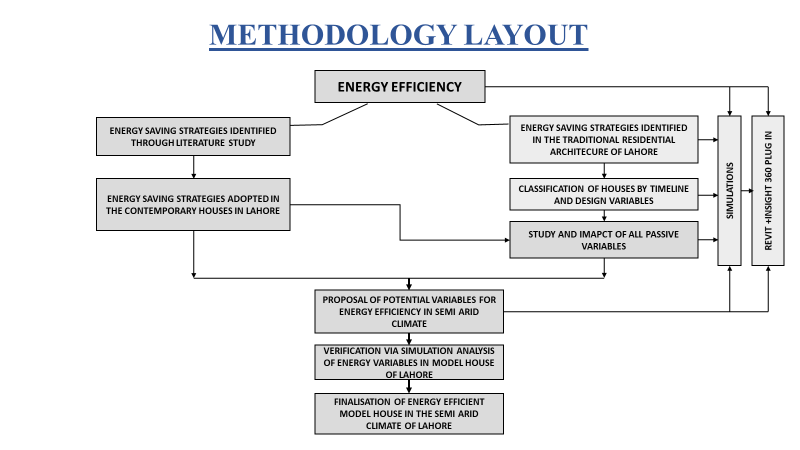
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| --- | --- | --- |
| Thesis Chapter Headings | Font Size 14, Centered, Capitalized, Numbered | Heading 0 |
| First Level Headings | Font Size 12, Centered, Capitalized, Numbered | Heading 1 |
| Second Level Headings | Same as above and just first letter capitalized | Heading 2 |
| Figures Formatting | As followed the chapter and section details  Captions feature in the MS word should be used for figures | For example figures in chapter 1 should be numbered 1.1 and then continue in the same format |
| Table Formatting | Tables should be formatted similar to figures  Captions feature in the MS word should be used for tables | For example tables in chapter 1 should be numbered 1.1 and then continue in the same format |
|  |  |  |

**FOR EXAMPLE:**

The focus of the research is on the residential buildings in Lahore, Pakistan, with various house forms and geometrical shapes in different proportions and orientations of the plot in diverse urban settings investigated dynamically (Williamson, 1997). The cooling and heating loads were premeditated for each model house unit designed. The results were evaluated to optimize the thermal behavior of the models. The quantitative method adopted has been extended to test the model house as a valid resolution to address the issue explored in the thesis as in Fig 1.1.



**Figure 1.1** *Graphical Illustration of the Research Strategy. Source: Author*

1. Devising a problem statement based on observations and literature archives. Previous research is carefully studied and analyzed. Relevant approaches are formulated based on the building design process, performance assessment methodologies, building simulation and optimization and theories.
2. Both Current and previous research pieces, concepts and philosophies aided in collecting information on the problem area.
3. Investigations based on the collected strata and explanation of the problem statement. A model house proposed after detailed studies and a testable model house was planned as the problem solution. A prototype computer tool Autodesk Revit with 360 plug-in that implements the proposed model house design, was adopted (Del et al., 2019). The simulation software gives the cooling and heating loads of the house's performance in a simplistic form (Reddy, et al., 2016). Therefore, the model house is viewed as a scientific object and the thematic models describing the scientific item are studied during experiments applying the suggested solution to answer the problem. The majority of the research was conducted utilizing both theory and simulation, as in Fig 1.2.

**Figure 1.2** *Methodology of the Thesis Study based on Simulation Analysis. Source: Author*

Table 1.1 A Sample Table

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Start Date** | **Duration** | **End Data** |
| **Literature Review** | Sep 1, 2020 | 8 Months | April 30, 2021 |
| **Model Development** | January 1, 2020 | 3 Months | March 30, 2021 |
| **Experimentation** | April 1, 2021 | 6 Months | September 30, 2021 |
| **Dissertation Writing** | June 2022 | 3 Months | August 2022 |

**GENERAL RECOMMENDATIONS:**

|  |  |
| --- | --- |
| **ITEM** | **SPECIFICATIONS** |
| External Cover | Hard Cover and Binding  Color = Maroon with Golden Writing |
| Writing on Cover Page | The first page is the template for cover page with inscription in golden  Recommended font is Times New Roman with 22  UMT logo should also be in gold |
| Writing on Spine | Inscription on Gold Color (sample is provided below) |
| Paper Size | A4 (8.2’’ x 11.6’’)-80g |
| Margins | Left = 1.5 inch Right = 1.0 inch; Top = 1.1 inch; Bottom =1.0 inch |
| Thesis Word Limit | 50 to 70 thousand words (excluding the references, appendices etc.) |
|  |  |

TITLE OF THE DISSERTATION. TIMES NEW ROMAN WITH 22 SIZE

SCHOLAR NAME REGISTRATION #

2023

**Sample Formatting for the Spine**

# BIBLIOGRAPHY

It is recommended that a reference management software such as EndNote, Mende-ley is used for bibliography. The references should be downloaded directly from the authentic sources to ensure accuracy of information.

Double spacing should be used between each reference. References that are more than one line long should be single-spaced within.

Separate sections for references and bibliography may be added as well if required.

**FOR EXAMPLE:**

# References

Abdel-Aziz, D. M., Shboul, A. A., & Al-Kurdi, N. Y. (2015). Effects of tree shading on building's energy consumption-the case of residential buildings in a mediterranean climate. *American Journal of Environmental Engineering*, *5*(5), 131-140.

# APPENDICES

Appendices are generally used to provide useful information about your work for more details but are not essential part of your research. Some of the items that become part of your appendices include detailed explanations and elaborations, additional or large diagrams, additional or long tables, detailed mathematical derivations, experimental standards and protocols etc.

Use letters to label the appendices e.g. Appendix A, Appendix B, etc. Each appendix should have a suitable title and should contain a specific type of information. Each appendix should start on a new page. Every appendix must be referred in your body text.