

(Formerly Delhi College of Engineering) Shahbad Daulatpur, Main Bawana Road, Delhi-42

Academic PG

F. No.105-66/Acad-PG/Thesis Format/2023/3561-65

Dated: |8 /04/2024

NOTIFICATION

The Academic Council, DTU in its 38th Meeting held on 07.03.2024 vide Agenda Item no. 38.4, has approved the format for submission of Thesis and Synopsis for the Master's and Ph.D Program in Delhi Technological University.

The format for submission of Thesis and Synopsis for the Master's and Ph.D Program in Delhi Technological University is enclosed for information to all.

(Prof. Rinku Sharma)
Dean (Academic-PG)

F. No.105-66/Acad-PG/Thesis Format/2023/3561-65

Dated: /8 /04/2024

Copy to:

- 1. P.A. to the VC for kind information of the Hon'ble Vice Chancellor, DTU.
- 2. P.A. to the Registrar for kind information of the Registrar, DTU.
- 3. All Deans/HoDs/Branch Incharge(s), DTU.
- 4. Head, Computer Centre with the request to upload the same on University website.
- 5. Guard File.

(Prof. Rinku Sharma)
Dean (Academic-PG)

GUIDELINES FOR PREPARATION OF THE THESIS

for

Doctor of Philosophy (Ph. D.)/Post Graduation



DELHI TECHNOLOGICAL UNIVERSITY

(Formerly Delhi College of Engineering)

Shahbad Daulatpur, Main Bawana Road, Delhi-110042, India

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GUIDELINES FOR PREPARING THE THESIS

1. PREAMBLE

While utmost attention must be paid to the content of the thesis/dissertation/report (hereinafter called the 'thesis'), which is being submitted in partial fulfillment of the requirements of the respective degree, it is imperative that a standard format be prescribed. The same format shall also be followed in preparation of the final soft copies to be submitted to the Library in future.

2. ORGANISATION OF THE THESIS/DISSERTATION/REPORT

This thesis shall be presented in a number of chapters as decided by supervisor and scholar approved by DRC, starting with Introduction and ending with Summary and Conclusions. Each of the other chapters will have a precise title reflecting the contents of the chapter. A chapter can be subdivided into sections, sub-sections and sub-sub-section so as to present the content discretely and with due emphasis.

The sequence in which the thesis contents should be arranged and bound should beas follows:

- 1. Cover Pages and Title Page
- 2. Acknowledgement
- 3. Candidate's Declaration
- 4. Certificate by the Supervisor(s)
- 5. Abstract

- 6. List of Publications
- 7. Table of Contents
- 8. List of Tables
- 9. List of Figures
- 10. List of Symbols, Abbreviations and Nomenclature
- 11. Chapters 1, 2,,. Chapter X)
- 12. References
- 13. Appendices
- 14. List of Publications and their proofs (Reprint/Acceptance Letter/Mail)
- 15. Plagiarism Report
- 16. Curriculum Vitae/Brief Profile

3. THESIS PREPARATION

3.1 Page Dimensions, Margins and Quality

• Standard A4 size paper may be used for preparing the copies. It should have the following page margins:

Top edge : 35 mm

Bottom edge : 30 mm

Left side : 40 mm

Right side : 25 mm

3

Page 3 of 22

	• The thesis shall be printed/xeroxed on white bond paper, whiteness 95% or above, weight 70 gsm or more. Tables and figures should be prepared on good quality paper preferably not lower than 70gsm. Tables and figures should conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.		
3.2	Cover Page/Title Page	0	
3.4	A specimen of the cover/title page is given in the Annexure I. It carries.	0	
	(a) The TITLE OF THESIS (Times New Roman, font size 20, bold, single line spacing, all characters uppercase except the symbols and numerals if used in the title of the thesis;	0	
	centered within the specified margin of the page).	0	
	TITLE OF THESIS	0	
	(b) The phrase (Times New Roman, font size 14, bold, each line in the Title/Sentence mode, single line spacing, centered within the specified margin of the page).	0	
	Thesis Submitted	O	
	in Partial Fulfillment of the Requirements for the	0	
	Degree of	0	
	(c) The name of the degree (Times New Roman, font size 20, bold, the whole line in upper case, centered within the specified margin of the page).	0	
	DOCTOR OF PHILOSOPHY	0	
	or	O	
	Post-Graduation Program Name		
	Field of Specialization/ Discipline		
	Where in (Times New Roman, font size 14, bold, both the characters lowercase, centered within thespecified margin of the page).	0	
	Where Field of Specialization/ Discipline (Times New Roman, font size16, bold, in Title mode, centered within the specified margin of the page).	C	
	(d) by (Times New Roman, font size14, bold, both the characters lower case, centered within the specified margin of the page).	0	
	by	C	
	(e) Name of the Student (Times New Roman, font size16, bold, full name as enrolled, allcharacters in Title mode case, centered within the specified margin of the	C	
	page). Name of the Student	C	
	(f) Roll Number (Times New Roman, font size12, bold, and all numerals within a pair of	0	
	small parenthesis, underneath the name of candidate and centered within the specified margin of the page).	O	
		0	

(Roll No. 2K/xxxxxxxxx)
(g) Phrase of supervision (Times New Roman, font size12, bold, line in the Title mode, centered within the specified margin of the page).
Under the Supervision of
(h) NAME(S) OF SUPERVISOR (S) (Times New Roman, font size 14, full name in title mode prefixed by Prof. or Dr. centered within the specified margin of the page, separated symmetrically (left and right aligned) in the same line in case of two supervisors. In case of three supervisors; name of two supervisors (left and right aligned) and third one in next line (centered aligned) followed by brief one-line mention of the names of the institution of the supervisors).
(Name)(Middle Name)(Surname) Designation, Name of the department/Centre Name of the Institution/University/Organization
(i) University logo (size=30 mm dia)
(j) Phrase for the name of the Department/Centre (Times New Roman, 14 pts., bold, full name of the University faculty in title mode, centered within the specified margin of the page).
To the Department/Centre of
For example, Department of Computer Science and Engineering/ Centre of Geo- informatics
(k) Name of the University (Times New Roman, font size16, bold, full name, all characters' uppercase/Title mode, centered within the specified margin of the page).
DELHI TECHNOLOGICAL UNIVERSITY
(Formerly Delhi College of Engineering) Shahbad Daulatpur, Main Bawana Road, Delhi-110042, India
(l) Month, Year (Times New Roman, font size 14, bold, full name of the month in title mode, comma,4-digit year in Arabic, all centered within the specified margin of the page).
December, 2023
Candidate's Declaration
The Bonafide Certificate of Supervision of the thesis given by the supervisor(s) shall be in or

3.3

and half line spacing using Times New Roman font size 12, as per the format shown in Annexure II.

3.4 Bonafide Certificate by the Supervisor

The Bonafide Certificate of Supervision of the thesis given by the supervisor(s) shall be in one and half line spacing using Times New Roman font size 12, as per the format shown in Annexure III. The heading **CERTIFICATE** Times New Roman font size 14 bold in the center should start about 60 mm -70 mm from the top of the page.

	The certificate shall carry the supervisor's signature in original and shall be followed by the supervisor's name, academic designation (not any other responsibilities of administrative		
	nature), department and full address of the institution where the supervisor has guided research scholar.	Ó	
	In case of two supervisors, the details about the signature, names, etc. mentioned above shall		
•	be centered symmetrically within the specified margin of the page. In case of three supervisors, the details of the third supervisor will appear in the centre underneath the first two.	0	
	The place and date of signature (left justified) common for all the supervisors will appear	0	
	below the signature(s) of the supervisor(s). One and a half spacing spacing in Time New Roman with size12 should be used.	0	
3.5	Abstract	0	
	Abstract should be an essay type of narration not exceeding four pages outlining their search problem, the methodology used, a summary of the findings, possible applications of the	0	
	research, and suggestions/directions for future research. The abstract should not contain cross citations. It should be typed single line spacing, in Times New Roman with font size 12 with	0	
	in the specified margin of the page. It should begin with the heading as the title of the thesis in title mode centered (bold), the name of candidate (next line) centered, and then 'ABSTRACT'	0	
- 2-5	with font size14, bold and centered. The text of abstract should begin thereafter.	0	
3.6	Acknowledgements	0	
	Acknowledgements shall be brief and should not exceed one page when typed in single spacing	0	
	Times New Roman with font size 12 within the specified margin of the page. It should begin with title ACKNOWLEDGEMENTS Times New Roman with font size 14 bold as heading placed in centre The signature of the candidate shall be made at the bottom right end		
* .	above his./her name typed in title case. One and a half spacing spacing in Time New Roman with size12 should be used.	0	
3.7	Table of Contents	0	
	The table of contents should list all the contents following this section. The preceding section like the Certificate and Acknowledgements will not find a place amongst the items listed in the	0	
	Contents, but the page numbers in lowercase Roman letters shall be accounted for them. The title TABLE OF CONTENTS in Times New Roman with size 14 bold a shading is	O	
	placed in centre. Single spacing in Time New Roman with size12 should be adopted for typing the contents in a manner shown in specimen copy of the TABLE OF		
	CONTENTS as given in Annexure V.	O	
3.8	List of Tables	C	
118 ⁻¹ 001	The list of tables should use exactly the same numbers and captions as they appear above the tables in the text. Single spacing in Time New Roman with size 12 should be used.	C	
3.9	List of Figures	C	
	The list of figures should use exactly the same numbers and captions as they appear below the	O	
	figures in the text. Single spacing in Time New Roman with size 12 should be used.	C	
	Page 6 of 22	C	
-		0	

3.10 List of Symbols, Abbreviations and Nomenclature

The list of symbols, abbreviation and nomenclature should use exactly the same numbers and captions as they appear above the tables in the text. Single spacing in Time New Roman with size 12 should be used typing the matter under this head. As far as possible, standard and popularly used symbols, abbreviations etc. should be adopted.

3.11 Chapter

0.

Chapters of a thesis may be broadly divided into 4 parts (i) introduction, literature survey and Identification of problem and issues (ii) statement, formulation and presentation of the problem, solution approach (iii) findings, results, discussion and implementation (iv) Conclusion, Future Scope and Social Impact.

- Each part may be suitably divided in to several chapters, and a chapter may be further divided into several sections and sub-sections, sub-sub-sections.
- Each chapter should be given an appropriate title. Whereas the last chapter should be titled as "Conclusion, Future Scope and Social Impact" only. The social impact should consist the direct/indirect impact or the practical implications of the thesis work for the society.
- Tables and figures in a chapter should be typed in title mode in single space in Times New Roman with font size 12. The titles of tables should be placed directly above the table where as the titles of figures should be placed directly underneath the figure in the very same page which refers to the contents they annotate.
- Foot notes should be used sparingly. They should be typed single space and placed directly underneath in the very same page which refers to the material they annotate.

3.12 Citation of References in the Thesis

Any work of other researchers used either directly or indirectly used in the research must be indicated at appropriate places in the thesis. It could be a journal paper, a paper in conference proceedings, a monograph, a personal communication, or a book; in physical or electronic form.

There are several standards for referencing. A candidate may choose one of his/ her choice with the consent of the thesis supervisor(s) and should be consistent throughout. A simple and commonly approach is suggested here.

A reference (other than a book or monograph) should be mentioned at the appropriate places in the text of the thesis by the last name of the first author followed by the year of publication placed inside a pair of parentheses.

- (i) An improved algorithm has been adopted in literature by Jhaand Shanker (2009).
- (ii) The issue of FMS scheduling along with balancing has been discussed by Kumar and Shanker (2000a) while the interaction amongst the objectives has been extensively investigated by Kumar and Shanker (200b) and Stickeret al (1984).

	ok or a monograph, however, the name/of author should be followed by the pair of parentheses. For example, Chopra and Meindl (2003) have dealt at	0	
	ysis and design of supplychain.	0	
appearance can	be used while for more than two authors, generally the last name of the first last and then the year within parentheses is used.	0	
		O	
Listing of Refe	erences in the REFERENCE section	0	
single spacing s	references should be typed in alphabetical order of the first author's name in starting 4 spaces below the heading REFERENCES in Times New Roman with	0	
and other detail	ld. The name(s) of the author(s) should be immediately followed by the year ls. The references should be serially numbered, separated by single space. The	0	
	issue, and page (from-to) while the book titles should be in title mode in italics	0	
•	e place and publishers. E- resources should have their proper URL. A typical given relates to the citation examples quoted above.	0	
	had sate associative committation graph are disorblind tally familially displayed to		
	references, Times New Roman with font size11 is recommended.	U	
controllable lead	hanker, K., 2009. A single-vendor single-buy reproduction-inventory model with d time and service level constraint for decaying items. <i>International Journal of earch</i> , Vol. 47, Issue 24, pp. 6875–6898.	0	
inter and synapsy.		0	
Jersey, Prentice	Meindl, P., 2003. Supply Chain Management: Strategy, Planning, and Operation. New Hall.	0	
	and Shanker Kripa, 2000a, A theory of balancing mechanism for comparing the imbalance measures in FMS loading, Proceedings of the Special International	0	
	Production Research (ICPR), 2000, Bangkok, August 2-4, 2000, pp. 133-139.	0	
	and Shanker Kripa,2000b, Interaction among FMS loading objectives: a parabolic tween workload balance and machine utilization, Proceedings of the Special	0	
	onference on Production Research (ICPR)2000, Bangkok, August 2-4, 2000, pp. 234-		
	04. Lehigh University. [Online](1.3)Available at: h.edu/~lvs2/download/vrpsolver.html[accessed 17 December2008].	0	
,	A COMPANY OF THE PROPERTY OF T	0	
Appendices		0	
* *	a thesis are provided to give supplementary information, which if included in nay serve as a distraction and could tend to dilute theme under discussion.	0	
• Each apper	ndix must find its reference in the main body of the thesis.	0	
	s shall carry the title of the contents reported and the same title shall be made ents page also.	0	
 Appendice 	s should be numbered using Roman numeral sin uppercase, e.g. Appendix-I,	0	
Appendix-		0	
• Figures, tables, equations and references appearing in appendices should be numbered			
•	an appendix e.g. II.1, II.2, and III.5 etc and should be referred to appropriate as in the case of chapter.	0	
	Page 8 of 22	0	

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3.14

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200	215	Diagiaviam Danayt
2	3.15	Plagiarism Report
7		The plagiarism verification form as per Annexure IV along with the plagiarism report should be placed.
	3.16	List of Publications and their proofs (Reprint/Acceptance Letter/Mail)
3		The list of publications made by research scholar during the period of research pertaining to the thesis submitted for the degree should be listed in chronological order in the order of
		international refereed journals, national refereed journals, proceedings of the conferences, in the same style as followed in providing the list of references (section 3.13). These publications,
)		wherever relevant should be referred to in the main body of the thesis. In addition, the proofs of the publications in the form of their reprints/acceptance letter/mail
)		need to be attached.
\circ	3.17	Curriculum Vitae/Brief Profile
\circ		The candidate's updated curriculum vitae/brief profile should be placed.
\circ		
0		4. TYPING INSTRUCTIONS
O	4.1	General
0	٠.	• This section includes additional information for final typing of the thesis. Some Information given earlier under 'Manuscript Preparation' shall also be referred to.
) .		• The impression on the typed/ duplicated/ printed copies should be black in color.
\circ		• Certain symbols characters or markings not found in a standard word processor may be
)		hand written using Indian ink or a stylus pen (in case stencil sheets are used). Corrections, interlineations and crossing out of letters or words are not permitted in any of the copies of
Э.		the thesis intended for submission. Erasures, if made, should be neatly carried out in all copies.
C		• A sub-heading at the bottom of a page must have at least two full lines below it or else it should be carried over to the next page.
)		• The last word of any page should not be split using a hyphen.
)		• Single spacing should be used for typing the general text. The general text shall be typed
C		in font Style Times New Roman and Font Size 12.Single spacing should also be used for typing:
		 Long Tables Long quotations
)		Foot notesMultilane captions
)		• References
)		• All quotations exceeding one line should be typed in an indented space -the indentation being 15 mm from either margin.
\mathcal{C}		9 Page 9 of 22
)		1 ago > 01 22

)

4.2 Chapters, Sections, Sub-sections, and Paragraphs

The format for typing Chapter headings, Section headings and sub-section headings are explained through the following illustrative examples.

Chapter Heading

Chapter 1

Introduction

Section

1.1 Outline of Thesis

Sub Section Heading

1.1.2 Literature Review

The word **CHAPTER** (no.) without punctuation should be centered 50mm down from the top of the page. Two spaces below, the title of the chapter should be typed centrally in upper case (capital letters) **TITLE OF THE CHAPTER**. The text should commence 4 spaces below this title, the first letter of the text starting 20mm, inside from the left hand margin.

The section or sub-section headings preceded by their numberings should be left-justified. The typed material directly below section or sub-section headings should commence 2 spacesbelow it and should be offset 20 mm from the left hand margin. The text can be divided over paragraphs with in a section or sub-section. Each paragraph should commerce 2 spaces below the last line of the preceding paragraph, the first letter in the paragraph being indented from the left hand margin by 20 mm.

5 NUMBERING INSTRUCTIONS

5.1 Page Numbering

Beginning with the first page of the text in the thesis (chapter 1), all pages should be numbered consecutively and consistently in Arabic numerals through the appendices. Page numbers prior to Chapter 1 should be in lower case Roman numerals. The title page is considered to be page (i) but the number is not printed. All page numbers should be placed without punctuation in the upper right hand corner, 12 mm from the top edge and with the last digit even with the right hand margin.

5.2 Numbering of Chapters, Sections and Sub-sections

The numbering of Chapters, sections and sub-sections should be done using Arabic numerals only and further decimal notation should be used for numbering the section and sub-sections within a chapter. For examples sub-section 4 under section 3 of chapter 2 should be numbered as 2.3.4. The heading for a section or a sub-section should immediately follow in the same line after the number with a single space in between.

Appendices and their sections and sub-sections should be numbered in an identical manner using uppercase Roman e.g. I, II, starting with Appendix-I.

5.3 Numbering of Tables and Figures

Tables and figures appearing anywhere in the thesis should bear appropriate numbers. The rule for assigning such numbers is illustrated through an example. If a figure in Chapter 3 happens to be the fourth, then Fig.3.4 is assigned to that figure. Identical rules apply for tablesexcept that the word figure is replaced by the word Table. If figures (or tables) appear in appendices, for example the third figure in Appendix-II will be designated as Fig.3. If a table is to be continued in to the next page, then a line should be drawn underneath an unfinished table and the phrase continued on page no... placed on the right side and under lined should be typed just below the line. The top line of the table continued on the next page should, for example read Table 2.1 (continued) placed centrally and underlined.

While referring to a figure or table in the body of the thesis, it should be referred to as Fig. 3.4, Table 2.1, Table-II.6, and so on.

5.4 Numbering of Equations

Equations appearing in each Chapter or Appendix should be numbered serially, the numbering commencing a fresh for each Chapter or Appendix. For example, the eighth equation in Chapter 2 should be numbered as (2.8) thus: f = c + xy

While referring to this equation in the body of the thesis it should be referred to as Eqn.

6 THESIS SUBMISSION AND BINDING SPECIFICATIONS

6.1 Preparation of Research Summary

After the completion of the research work and preparation of the draft thesis, a research summary is to be prepared in close contact with the thesis supervisor(s). It should begin with the title of the thesis (in Times New Roman with size 14 bold, centered), a single space gap, Like the thesis, the Research followed by the name and enrollment of the candidate (in Times New Roman with size 12 bold, centered) and then a single space gap followed by the title **Research Summary** (in Times New Roman with size 12 bold, centered). After a gap of space, the text should begin on the same page (there is no need for a title page).

Summary may be broadly divided in to 3 parts (i) introduction, literature survey and identification of problem and issues (ii) statement, formulation and presentation of the problem, solution approach (iii) findings, results, discussion, implementation and conclusions, and directions for future research. It should be typed single line spacing, in Times New Roman with size 12 within the specified margin of the page. The total number of typed pages should not exceed 10. The use of tables, figures, equations should be absolutely minimum unless they are extremely essential. Only the essential references should appear in the text. Sections and subsections (not exactly the same as used in the main thesis) may be used to enhance their readability. Only minimal essential part of appendices and reference list should be included as part of the Research Summary.

6.2 Submission for Evaluation

After the successful completion of viva voce examination and with approval of the viva Voce board

(a) The candidate should finalize the thesis and research summary should be prepared as per guidelines provided in this manual. In case of any problems, the supervisor(s) should be contacted.

Page 11 of 22

			-
		(b) The candidate should fill the checklist and sign the Certificate of Thesis Submission for Evaluation (Annexure-VI). The Certificate should be signed and submitted in duplicate.	C
		One copy after stamping by the concerned University official with due entries will be returned to the candidate.	C
		(c) For evaluation purposes, a candidate for Ph D degree is required to submit	C
		(i) four copies of Research Summary(ii) Four hard copies of the thesis printed on both sides and spiral bound using flexible	0
		cover of thick white art paper. The cover page should be printed as per specifications for the title page (Annexure-I).	(
		(iii) A CD with exactly identical contents in pdf format. The Candidate should ensure that the CD can be opened on any system.	(
		(d) For evaluation purposes, a candidate for M.Tech. degree is required to submit.	(
		(i) Three hard copies of the thesis printed on both sides and spiral bound using flexible cover of thick white art paper. The cover page should be printed as per specifications	(
		for the title page (Annexure-I). (ii) A CD with exactly identical contents in pdf format. The candidate should ensure that the CD can be opened on any system.	(
	6.3	Final Submission	(
	*	Incorporating all the suggestions made during the evaluation process by the internal and	E
		external examiners and the suggestions emerging during viva voce examinations including modifications in the title of the thesis.	. (
		Following should then be submitted:	
		(a) Certificate of Final Thesis Submission (Annexure VII) signed by the candidate and the	
	4	supervisor(s) certifying that all the corrections suggested by the examiners have been incorporated, the thesis has been prepared as per guidelines, due credit to other researchers	
		have been appropriately accorded and no part of the thesis is copied from any other source.	
·		(b) The final thesis should be printed on both sides on good quality white paper not less than	
		80gsm and hard bound as per specifications given in Annexure-VI . The cover page shill be printed as per specifications for the title page (Annexure-VIII/IX) except that it will include month and year of final submission.	
		(c) Colour Code: The color code for the thesis will be as follows:	
		(i) M.Techbound with hard cover not less than 120gsm with printed in blue color.	
		The side back of the thesis should also carry the title, name of candidate and month and year of final submission.	
		(ii) Ph. D .—with impressions embossed in Permanent Maroon color . The side back of the thesis should also carry the title, name of candidate and month and year of final submission.	(
		(d) For electronic repository of the University, a CD with exactly identical contents as the final thesis in pdf format should also be submitted. The candidate should ensure that the	
		CD can be opened on any system. The CD should carry the name, enrollment number and programme of the candidate.	
		12 Page 12 of 22	
		1 age 12 01 22	(
			6

(e) Number of copies (incorporating all corrections including viva-voce examination) Ph.D.: Two copies printed on both sides and hard bound as per University specifications, plus a CD with thesis contents in pdf format. M.Tech: To copies printed on both sides and hard bound as per University specifications plus a CD with thesis contents in pdf format.

Note: The candidate must submit the required certificates at the time of both the submissions (a) for evaluation and (b) final after viva voce examination for provisional degree certificate.

7. SIZE OF THESIS

There is no rigid restriction on the size of the thesis. However, for Ph.D., it should not generally exceed 300 pages of the typed matter beginning from the first page of Chapter to the last page of the last Appendix. Similarly, for M.Tech., it should be not exceeding 125 pages.

8. REFERENCES

The referencing style must be uniform throughout the thesis. It has to be decided by the concerned department research committee.

		ANNEXURE-I
in the second	eneratron y Propositionius (piùricaria l'Origida) especia a biografia de l'Agridio	0
	TITLE OF THESIS	0
	TILE OF THESIS	0
		0
	A Thesis Submitted	
	In Partial Fulfillment of the Requirements for the Degree of	0
		0
	DOCTOR OF PHILOSOPHY by	0
	NAME OF STUDENT	O
4,	(Enrollment No.)	O
		0
	Under the Supervision of Dr (NAME OF SUPERVISOR)	0
	Institution	
		C
*		C
	*DELTECH *	C
	A POLICE OF THE PARTY OF THE PA	C
	Department of	
	DELHI TECHNOLOGICAL UNIVERSITY	
	(Formerly Delhi College of Engineering)	
	Shahbad Daulatpur, Main Bawana Road, Delhi-110042. India	a (
	Month, Year	
	TIA CARDARY A: COM	
	14 Page 14 of 22	



DELHI TECHNOLOGICAL UNIVERSITY

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CANDIDATE'S DECLARATION

I	hereby certify that the work which is being presented in
the thesis entitled	
-	for the award of the Degree of Doctor of Philosophy, submitted
in the Department of	, Delhi Technological
University is an authentic record of my own	n work carried out during the period from
to under the supervis	sion of
The matter presented in the thesis has not	been submitted by me for the award of any other degree of this
or any other Institute.	
	Candidate's Signature
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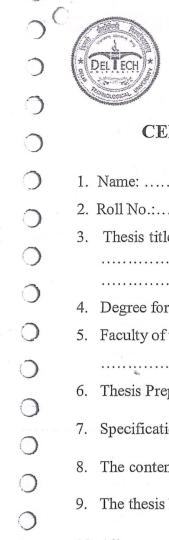
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ANNEXURE-V CONTENTS Title Page No. Certificate Abstract iii Acknowledgements vi vii **Dedication (optional)** VIII List of Tables List of Figures XV List of Symbols and Abbreviations xxiii **CHAPTER 1:** INTRODUCTION 1-58 1.1. **GENERAL** 1 1.2. 2 12 1.2.1 1.2.2 19 25 1.2.2.1 1.2.2.2 29 1.2.2.3 33 45 1.3. 1.4. 58 CHAPTER X (Last Chapter): Conclusion, Future Scope and Social Impact XXX



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10	. All sources used have been cited appropriately. YES	\square NO	
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M.Tech. Thesis

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Name of the Candidate

Month Year

TITLE OF THESIS

A Thesis Submitted In Partial Fulfillment of the Requirements for the Degree of

MASTER OF TECHNOLOGY in FIELD OF SPECIALIZATION

by

NAME OF STUDENT (Enrollment No.)

Under the Supervision of Dr (Name of Supervisor), Institution



Department of

DELHI TECHNOLOGICAL UNIVERSITY

(FormerlyDelhi College of Engineering) Shahbad Daulatpur, Main Bawana Road, Delhi-110042. India

Month, Year

Ph. D Thesis

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Title of Thesis Title of Thesis

Name of the Candidate

Month Year

TITLE OF THESIS

A Thesis Submitted
In Partial Fulfillment of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

by

NAME OF STUDENT (Enrollment No.)

Under the Supervision of Dr (Name of Supervisor), Institute



Department of.....

DELHI TECHNOLOGICAL UNIVERSITY

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Month, Year

Agenda 38.4: Revision of Format of Thesis and Synopsis for the Master's and Ph.D Program.

Meeting of the Committee to evaluate/ finalize the thesis format in respect to, the Ph.D and PG Programmes DTU was held on 23.11.2023, 08.12.2023 and 02.01.2024 in the office of HoD, IT. Following were present:

1. Prof. Dinesh Kumar Vishwakarma, HOD, IT	Chairperson
2. Prof. Rishu Chaujar, Deptt of AP	Member
3. Dr. Virender Ranga, Asso. Prof, Deptt of IT	Member
4. Dr., Manjeet Kumar, Astt Prof., Deptt of ECE	Member
5. Dr. Sanjay Kumar, Astt. Prof, Deptt of CSE	Member
6. Dr. Rohit Kumar, Astt. Prof. Deptt. of ECE	Member ⁻

The Committee took note of the following:

- 1. There was no fixed format of Ph.D/ Master's Thesis at DTU.
- 2. An attempt has been made to prepare a format of Ph.D Master's thesis which can homogeneously been followed by the students of DTU for preparation of their thesis.
- 3. The Committee referred the best practices being followed in the different renowned institutes of India such as IIT Delhi, IIT Bombay, NSUT etc.
 - 4. The Committee discussed the following aspects of the thesis:
 - (i) Preamble
 - (ii) Organization of the Thesis
 - (iii) Thesis preparation
 - (iv) Typing Instructions
 - (v) Numbering Instructions
 - (vi) Thesis submission and Binding Specifications.
 - (vii) Size of the Thesis
 - (viii) References
- 5. In addition, the Committee also discussed how the outcome of the thesis will help the society and policy makers and the same is added in the proposed format.

Thesis format for PG/ Ph.D programs, DTU is placed at *Annexure pages 1* to 22.

Decision: The Academic Council considered and approved the format for submission of Thesis and Synopsis for the Master's and Ph.D programs with minor changes as suggested by the Council.

