GUIDELINES FOR PREPARATION OF
B. TECH. PROJECT SYNOPSIS

CS & IT

The detailed guidelines and formats for preparation of B. Tech. Project Synopsis report is explained in the succeeding paragraphs:-

[I] GENERAL TYPING INSTRUCTIONS

(a) Standard A4 size (297mm x 210mm) paper should be used for preparing the report.

(b) Tables and figures should conform to the margin specifications (i.e. inline with the text). Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.

(c) General Page Layout:-

    (i)   The margins of every page of the report should be as follows
    Top : - 1"   Bottom : - 1"   Right: - 1"   Left: - 1.5"

    (ii)   To ensure that the margins are correct:
    Header: - 0.5"   Footer: - 0.5"
    All the data/text should fit within the above specified margin

    (iii)   requirements (including tables, figures, graphs etc.). Full paper points of diagrams/image should confirm to the sure margins as specified above.

    (iv)   Right Header   Project Title (In Italicized Font)

    (v)   Left Footer   Name of Department, College.
    [Eg.: IT DEPARTMENT, SRMCEM, Lucknow]

    (vi)   Right Footer   Page Number

(d) Other specifications will be as under:

(i)	Font Type	-	Times New Roman
(ii)	Chapter Headings	-	Center/Right Aligned, Bold and Underlined with Font Size 18.
(ii)	Sub Heading	-	Bold & Font Size 14 (may be underlined if required)
(iv)	Contents	-	Font Size 12
(v)	Paragraphs	-	Justified
(vi)	Line Spacing	-	1.5
(vii)	Single line spacing should be used for typing Long Tables; References.		
(viii)	Foot notes/contents within header/footer can be 9 or 10 point size (i.e. should be less than normal text.		
(ix)	The Title of the Project should be in 'Title case' or 'ALL CAPS'.		

[II] TABLES & FIGURES

The term 'Table', is meant for tabulated numerical data in the body of the report. All other non-verbal material used in the body of the report as charts, graphs, maps, photographs and diagrams may be designated as 'Figures'.

(a) A 'Table' or a 'Figure' including their caption should be accommodated within the prescribed margin limits. <u>It should appear on the page following the text where their first reference has been made.</u>

(b) Tables and Figures one half or less in length may appear on the same page along with the text. However, they should be separated from the text both above and below by appropriate spacing.

(c) Two or more small tables or figures may be grouped if necessary in a single page.

(d) Unless colors are significant; Figures, Images are Tables should be printed on gray scale.

(e) The Figures caption is always appended at the bottom of the figure, while the Table caption is included at the top of the table**.**

(f) Tables and figures appearing anywhere in the project should bear appropriate numbers.

[III] <u>NUMBERING INSTRUCTIONS</u>

(a) Minimum font size is 10-point for page nos. and should be kept consistent throughout the text.

(b) Equations appearing in the report should be numbered serially, however this should be followed consistently throughout the text. All the equations should be center aligned.

(c) Equations should be referred within the text, throughout their respective equation numbers.

[IV] <u>MANUSCRIPT PREPARATION</u>

The sequence in which the Project Synopsis should be arranged is as follows:

(a) Cover Page (Refer Appendix 'A')

(b) Introduction [This may include the general introduction of the project, general background, previous work done in this area (brief literature survey).]

(c) Problem Definition

(d) This should consist of Project objective and Proposed Methodology.

(e) Project Objective (This should highlight the aims and objectives clearly indicating the scope of the project, the ideas and the approach of proposed work.)

(f) Proposed Methodology (This discusses the proposed path of implementation of the project. A complete block diagram should be given followed by description of each block.)

(g) Theory (This head should describe the related technology involved in the project, mathematical concepts used, description of the algorithms, salient features of the proposed design etc.). Please ensure that 'Theory' should not be used as Chapter Heading. Heading should be given as appropriate with respect to topic/content described.

(h) Software/Hardware Requirements and Specifications (This may include the basic requirements and specifications for the hardware/software setup, depending upon whether the project is a Hardware model/Software model or both).

(i) Module description (This should describe the proposed input, output and functioning of each module in detail.)

(j) Data Flow Diagram (DFD)/Class Diagram & Use Case Diagram (Optional depending on the type of the project)

DFD: 0-level (Taking project as a whole)

(This describes the flow of data through information system.)

Class Diagram: High level class diagram (should only include domain level classes)

(This describes the static structure of a system by showing the system's classes, their attributes, operations and relationships among classes.)

Use Case Diagram: (The main purpose of use case diagram is to show what system functions are performed for which actor.)

(k) Applications/Advantages/ Limitations along with Proposed Cost (This should cover the various merits and demerits of the project. The advantages should be elaborated as Applications, while limitations serve to be a source for future improvements).

(l) References (Refer Appendix-B).

Note:- 1. Material downloaded and copied from internet or any Research Paper should be edited properly in the sense to remove comic fonts, shadings, hyperlinks etc.

2. Any other point not covered in (1)–(9) can be incorporated at the department level.

A PROJECT SYNOPSIS

On

PROJECT TITLE PROJECT TITLE PROJECT TITLE, PROJECT TITLE

Submitted in the Partial Fulfillment of the Requirement for the Award of
BACHELOR OF TECHNOLOGY

In

Electronics & Communication Engineering
(2025)

By

[Name(s) of the Student]

Under the Guidance

Of

[Name of the Project Guide]

SHRI RAMSWAROOP MEMORIAL COLLEGE OF ENGINEERING & MANAGEMENT, LUCKNOW
Affiliated to
Dr. APJ ABDUL KALAM TECHNICAL UNIVERSITY, UTTAR PRADESH, LUCKNOW

REFERENCES

[1]   S. Ariponnammal and S. Natrajan, "Transport Phenomena of Semiconductors," Journal of Medical Physics, Vol. 42, No.5, pp. 421-425, April 2005.

[2]   P. Banerjee, M. Haldar, D. Zaertsky, and R. Anderson, "Overview of 4 Compiler for Synthesizing Matlab Programs onto FPGAs," IEEE Transactions on Very Large Scale Integration (VLSI) System, Vol. 12, No. 3, pp. 312-324, March 2004.

[3]   J. Jores (2006), "Contact Mechanics," Cambridge University Press, U.K., Chapter 6, pp. 144-164.

[4]   C. Rovers Eds., "Recent Advances in DSP Techniques," 2nd ed., Taylors Frances Group, USA, 2006.

[5]   R. Smith (2008), "Contact of Cylindrical Surfaces involved in a Non-Steady Motion,". Available Online at: http://www.casphy.cenm.edu/homepage.html

[6]   H. D. Cheng, "Image Features Extraction using Volterra Filters," Proc. of 5th IEEE International Conference on Machine Vision and Artificial Intelligence, Beijing, China, pp. 42-57, October, 2009.

[7]   A. K. Barnard, "A Study of Stereo Matching Algorithms for Mobile Robots," A Thesis Report for University of Bath, U.K., 2005.

[8]   J. P. Williamson, "Non-Linear Resonant Granit Devices," US Patent 3 624 12, July 16, 1990.

[9]   Motorola Semiconductor Data Manual, Motorola Semiconductor Products Inc., Phoenix, AZ, 1987.