

## LaTeX Instruction Manual For Minor Project Report Preparation

### Basic Steps:

- The *SRM\_Thesis\_Format* package contains a **Latex template** and **Latex class file**. Latex is a type setting software which will format your thesis/report as per SRM University requirement.
- This requires **Latex2e** package in your computer to be installed. **Latex2e** package is a freeware and the .exe file can be downloaded from <http://ctan.imsc.res.in/systems/windows/protext/>
- Save the .exe file, when prompted, in any convenient location and unzip the downloaded file.
- Run setup and install **MiKTeX** first and then install **TeXstudio**.

The **Latex2e** installation is now completed.

### 2. Enable document class :

Now open *format\_thesis.tex* available in SRM\_Thesis\_format folder. Enable document class which is related to you. For example if you are a B.Tech student you have to enable

`\documentclass[BTech]{srmthesis}`. The % symbol comments the syntax.

The enabling of BTech document class will provide you with a template that conforms to SRM B.Tech project specification.

### 3. TITLE PAGE Formatting:

(a) You need to enter your title of thesis in the appropriate space as illustrated below :

`\title{Enter The Project Title}` (It is not case-sensitive)

(b) Name of the project students: (In the ascending order of Register Number)

`\firstauthor{Enter your name here}`

`\secondauthor{Enter your name here}`

`\thirdauthor{Enter your name here}`

`\fourthauthor{Enter your name here}`

For M.Tech students, enter your name in the line `\firstauthor{Enter your name here}` and ignore second, third and fourth author options.

(c) Other fields:

Other fields like guide's name, guide's designation, HOD name, department, branch of study / specialization, month & year of submission must be entered in the respective fields. All these data will be automatically formatted and written in the respective places with appropriate font size.

### 4. BONAFIDE PAGE:

The student need not do anything as all information required for Bonafide page will be automatically generated based on the input given in the previous section.

### 5. ABSTRACT:

**250 words. Abbreviations: List key abbreviations used throughout the text. Remember that these should still be spelt out in full the first time that you use them, with the abbreviation in brackets.**

The student has to either type or copy & paste the contents of the abstract just below the section  
`\abstract`.

## 6. ACKNOWLEDGEMENT:

This should acknowledge key assistance and funding sources.

The student has to either type or copy & paste the contents of the abstract just below the section  
`\acknowledgement`.

## 7. TABLE OF CONTENTS, LIST OF TABLES, LIST OF FIGURES:

The student need not do anything as all information required for the above tables will be automatically generated as the student adds the chapter-wise content.

## 8. LIST OF ABBREVIATIONS:

The student has to input all abbreviations under the section `\abbreviations` as per the below format:

```
\acro {acronym} {expanded form}
e.g., \acro {GA} {Genetic Algorithm}
      \acro {WHO} { World Health Organisation}
```

## 9. LIST OF AND SYMBOLS AND NOMENCLATURE:

The student has to input all symbols and nomenclature in alphabetical order under the section `\chapter* {list of symbols}` as per the below format:

```
\textbf{$\symbol$} \>what the symbol represents, name of the unit
e.g., \textbf{$\theta$} \>Angle of twist, rad
      \textbf{$\Sigma$} \>Stress, N/sq.m
```

## 10. CHAPTERS

**(Introduction)** ~500-750 words (= 2-3 Pages). This should provide a concise and fairly specific background to the project, and the hypothesis / questions specifically being addressed. It should NOT be a full literature review.

**(Materials and Methods)** ~1500 words (6 Pages) . This should provide sufficient detail (or reference to sufficient detail) to allow another worker to carry out the same experiments. If you are referring to a published method, it is often useful to outline the protocol "in brief".

**(Results)** ~1500 words(6 Pages). This should provide a concise account of the results obtained, in a logical order that hopefully tells a story. This will not necessarily be the order in which you carried out the experiments! Make maximum use of figures / tables - remember a picture often replaces a thousand words. A standard scientific paper in most journals will contain ~6 (maximum 8) figures or tables.

**(Discussion/Conclusion)** ~1500 words(6 Pages). This should NOT be a repetition of the Results, but should critically evaluate the significance of your results in relation to published works, which should also be critically appraised. It will usually contain ideas of further work required to clarify your findings. This is a valuable inclusion in a project report where you may not have had sufficient time to complete the research as you might otherwise have hoped for.

The student has to type (if already has it in word format the student may copy & paste) the contents of the chapter just below the section `\chapter`.

(a) To start a new section, use the syntax

```
\section {section title} < Type your contents coming under this section>
```

(b) To start a sub-section and a sub-sub-section, you can use the syntax

`\subsection {subsection title}`

`\subsubsection {subsubsection title}`

**11. TO INSERT A FIGURE, TABLE, FLOWHCART OR GRAPH,** Please refer back to the **.tex** file.

## **12. BIBLIOGRAPHY (OR) REFERENCE**

The student has to download any of the reference management system software such as **JabRef**. It is a freeware which can be downloaded and installed. Then create a database of all the references like journal articles, conference proceedings, Technical reports, Book, Book chapter, Web page etc in JabRef management system and have this file in the folder where your **.tex** file is placed.

At the end of the **.tex** template, there is a field

`\bibliography{Enter your reference management file (.bib)}.`

For cross reference the same in your text, call them by their key word, in this

way `\cite{key word}`.

Then the references which you cross referenced alone are formatted in your report as per SRM University specified.

## **13. TO GET THE OUTPUT OF THE REPORT**

After completing the above, you can get the output of the report by clicking the “RUN” button .

The output of the report can either be obtained in pdf format or eps format.