B.Tech Final Year Project Handbook

Department of CSE&IT

School of Engineering

ITMU Gurgaon

B.Tech Final Year
Project Handbook

Project Title: ……

……

Supervisor: ……

Co-Supervisor (if any) ……

Project Group: ……

Student Details:

Roll No.	Name	Branch (CSE/IT)

Introduction

"One of the reasons I like keeping a logbook is that it makes time tangible. Turn the pages, and you can feel the days passed." *-Austin Kleon*

This handbook has been designed in a lucid and systematic manner that can prove to be a helping hand throughout the entire journey of a student's B.Tech Project. It showcases the ways to practice the ethics right from the phase an individual would be going through the Planning of his project till the time he completes the Testing phase. Needless to say, giving importance to the thumb rule of project development of completing the project well before the deadline, it also provides a transparent view of the timeline that one should keep in mind with respect to the different phases of project.

It also reflects the guidelines to prepare the final report as we truly believe in the fact that technical reports should be given a lot of importance in terms of standardization of the guidelines to come up with improved readability and appearance. Each group of students is expected to follow up the guidelines given in this book that includes the complete and detailed description of the colour, organization, tables, figures, certificates etc.

Each group of students is expected to maintain a project handbook to diarise the day to day work on the projects. Also every discussion that the student makes with the guide shall be recorded in this handbook. It stands as a proof of your hard work and even as a documentary proof for the future reference that allows quick access to the chronology of your work.

So hope you will keep this handbook safe in your custody and we wish you all the luck for your project and future endeavors.

Table of Contents

1. The Importance of Final Year Projects

Your final year project is one of the most important aspects of your engineering degree that reflects the strengths and weaknesses of your skills gained during entire engineering duration.

Engineering is first and foremost the application of knowledge. However, the application must be carried out with judgment, to ensure that the resultant system is effective and efficient, and that it is of benefit (which raises the issue of the ethical responsibilities of engineers – a topic for another day). The final year project is one of the primary mechanisms used by the University to provide you with an opportunity to gain experience in the practical, effective, efficient, and beneficial application of what you have been studying for the past several years. Naturally, you will continue to gain engineering experience after you graduate but the final year project will be your first exposure to the full rigor of engineering practice. It is essential that you learn from this exposure and practice all of the engineering methodologies involved. It is particularly important that you learn not just to apply what you know, but to apply it with judgment, with the ability to assess what you are doing and to be critical of it.

Now that we have established the importance of your final year project, let's look at the important issues in pursuing it. There are four principle concerns:

- Choosing a project
- Planning, executing, and managing your project
- Assessment of your project
- Documenting your project

2. Choosing Your Project

Given that you are going to spend a lot of time working on your project, it is essential that you pick a project which you like and which you are capable of doing. Note that these are not necessarily the same things: just because you like a particular project doesn't mean you are qualified to do it. You may not have taken all of the requisite courses or it may be a more theoretically-aligned project whereas you might be a more practically-oriented engineering student (or vice versa). Think long and hard before making your final choice. At the very least, you should take the following steps in assessing and choosing an appropriate topic.

1. Find out what are your options. A list of projects proposed by academic staff is usually circulated in your 6^{th} semester to choose among the projects. Try to choose the project

according to your strength and interest.

2. Think about proposing your own project. Go through the Project Manuals, old projects by seniors, IEEE magazines, journals and Internet to find out the best option. Using the descriptions you have read as a guideline, write your own proposal. Note, however, that the feasibility and suitability of your proposal will have to be assessed before it can be added to your list. Submit your proposal to the Project Coordinator who will have it reviewed by an appropriate member of staff.
3. Make a short-list of two-three projects:
4. Go and talk to the supervisors (i.e. the member of staff who proposed the project or the person nominated by the project coordinator in the case of your own proposal).
5. Submit your final proposal to the Project Coordinator who will have it reviewed by an appropriate member of staff.
6. Your selections will now be reviewed by the project coordination panel.
7. A list of allocated projects will be published.
8. Now you can begin your project in earnest.

3. Planning, Executing, and Managing Your Project

Most students have no idea how to begin their project. This is understandable: it is the first time they will have had to tackle a large amount of work that is probably poorly defined.

Majorly the projects can be categorized in two category:

- Projects based on research work, for eg. Implementation/ comparison of different techniques/ tools/algorithms from research paper.
- Projects based on implementation, for eg. E-commerce website, mobile app development, desktop application etc.

To get started, it helps to know the key activities that result in a successful project. They are:

i. Problem identification
ii. Requirements elicitation
iii. Problem modeling
iv. System analysis and specification
v. System design
vi. Module implementation and system integration

vii. System test and evaluation
viii. Documentation
ix. Project management

3.1 Problem Identification

Problem Identification involves a lot of background work in the general area of the problem. Normally it calls for the use of prior experience, typically experience you may not yet have. It requires an ability to look at a domain and to identify the issue that needs to be addressed and the problem to be solved. It also required an understanding of the theoretical issues by which we can model the problem. So, the first thing you need to do in your project is become an expert in the problem at hand: a problem-domain expert.

Collect any papers, articles, book chapters you can on the area and make a copy for your own personal archive. Make sure you keep a full citation index, i.e., you must record exactly where every article you copy comes from. Typically, you need to record the title of the article, the authors, the name of the magazine/journal/book, the volume and number of the journal or magazine, and the page numbers. If it's a chapter in a book and the author of the chapter is different from the editor of the book, you need to record both sets of names.

3.2 Requirements Elicitation

Having chosen your project, you will have in your possession a short description of what is involved in the project. You will realize by now that this is completely insufficient for you as a basis for doing the project. Consequently, your next task must be to find out exactly – and completely – what the project entails.

3.3 Problem Modeling

Once you know the requirements, and are an expert in the problem domain, you can abstract the problem from the problem space and model it computationally: this means we can identify the theoretical tools we need to solve the problem.

3.4 Systems Analysis and Specification

With the requirements document, problem definition, and computational model identified, we can now say exactly what our system will do and under what circumstances it will do it. This is the system specification. In writing the specification, you should begin with the requirements document and then you should identify the following.

- The system functionality
- The operational parameters (conditions under which your system will operate, including required software and hardware systems)
- Failure modes and actions on failure
- Limitations & restrictions
- User interface or system interface

It should also include

1. A functional model. This will usually take the form of a functional decomposition: a hierarchical breakdown of the major functional blocks involved in the processing/analysis/transformation. Typically, this will be a modular decomposition of the computational model. Each leaf node in the functional decomposition tree should have a short description of the functionality provided, the information (data) input, and the information (data) output.
2. A data model. The identification of the major data-structures to be used to represent input, output, and temporary information (Use case Diagrams). This is sometimes known as a data dictionary. Note that we are not interested here in the implementation of the data-structures (e.g. linked list, trees, arrays) but with the identification of the data itself. Very often, it is useful to use entity- relationship diagrams to capture the data model.
3. A process-flow model. This model specifies what data flows into and out of each functional block (i.e. into and out of the leaf nodes in the functional decomposition tree). Normally, data-flow diagrams are used to convey this information, and are organized in several levels (i.e. DFD level 0, DFD level 1, etc.) The level zero DFD is equivalent to the system architecture diagram and shows the sources and sinks of information outside your system.
4. A behavioral model. This will typically use a state-transition diagram to show the behavior of the system over time, i.e. the different states it can be in, the event and triggers that cause a change in state, and the functional blocks associated with each state. It is also often useful to create a control-flow diagram: a version of the data-flow diagram with events and triggers superimposed on each process.
5. A clear and detailed definition of all the user and system interfaces; one of the best ways of encapsulating this information is to create a user-manual.

All this information is collectively known as the “system specification” and is the result of an activity know as systems analysis.

3.5 System Design

You are now in a position to design your system using whatever design methodology is appropriate for the area that said, there are a few general guidelines that apply to all areas: Identify several design options – algorithm, data-structures, files, interface protocols – and compare them. Analyze your design to ensure it is technically feasible (i.e. validate its realizability). Remember, you can't always build everything you design, either for theoretical reasons (ideal filters, for example) or for pragmatic reasons (a 1-Farad capacitor would make for some interesting implementation problems). Analyze your design to ensure it meets the specifications (i.e. validate its operational viability) Cost your system (i.e. validate its economic viability) Choose the best design. You will have to define what "best" means for your particular project. It might mean the cheapest to manufacture, it might mean the fastest, and it might mean the smallest – it all depends. It's up to you to identify the test for optimality.

3.6 Module Implementation & System Integration

Finally, we are at the point where we can build the hardware and/or write the software. There is not much to say here since the construction methodologies are so domain specific, even more than in the case of design. However, there is one small piece of advice which is applicable to all areas: use a modular construction approach. Don't attempt to build the entire system in one go in the hope that, when you switch it on or run it, it will work. This is the so-called Big Bang approach (everything comes into existence at one instant) and its name is very appropriate for it almost always results in initial chaos. It is much better to build (and test) each component or modular sub-system individually and then link them or connect them together, again one component at a time.

3.7 Testing and Evaluation

Most undergraduate engineers misunderstand the meaning of the word testing. They think it means showing that something works: their project, for example. But it doesn"t. Testing means much more than this. Certainly, you need to show that it works (i.e. that it meets the requirements and operates according to the specification), but a good testing strategy also attempts to break the system: to show not where it works but where it fails. This is sometimes referred to as stress testing. A well-engineered system will always have been stress-tested: that is, taken beyond the point at which it was expected to operate to see how it behaves under unexpected circumstances.

3.8 Documentation

1. So that you can be given credit for it (your final mark depends on it);

2. So that others can carry on your work and develop or maintain your system.

It is extremely important that you document your work at every stage of your project

3.9 Project Management

Projects requiring the construction of physical models will be allocated dedicated bench- space in the laboratory. If any other special facilities are required, you should inform the Superintendent Technician. In choosing electronics components for experiments you should try to make use of standard components. Orders for specialized components may be submitted to the Project Technicians if there is no equivalent stock item.

4. Project Schedule

A project schedule is an indispensable tool: building it forces you into thinking about all the things you need to do, their inter-relationships, the time each will take, and what each one will be used for. Project management tools usually represent a finished schedule in one of two ways, a PERT chart and a GANTT chart. Each project is categorized into one of the two categories (see table below). The Following milestones may be considered depending upon the type of projects:

Evaluation deadline	**Deliverable**	
	Research based Projects	**Implementation based Projects**
I *(Mid of Sep in 7th sem)*	Literature survey/ Project Understanding, preliminary topic selection, motivation, and synopsis. *(Project progress: 10%-15%)*	Outline of the Project (Objective, uses), preliminary topic selection, motivation, and synopsis. *(Project progress: 15%-20%)*
II *(Mid of Nov in 7th sem)*	Topic freezing, collection of related material (data set, tool understanding), and report. *(Project progress: 40%-50%)*	Topic freezing, requirement gathering, required hardware/software collection & understanding, database design, and report. *(Project progress: 40%-50%)*
III *(Mid of Feb in 8th sem)*	Implementation/validation, challenges and issues *(Project progress: 60%-80%)*	Interface design, Implementation (coding) *(Project progress: 60%-80%)*
Final *(Mid of Apr in 8th sem)*	Final Implementation/outcome *(Project progress: 75%-100%)*	Final working project/deployment *(Project progress: 75%-100%)*

Note: Dates for evaluation will be declared as per the academic calendar of the school.

5. Evaluation criteria

As per the course of study scheme, grades will be awarded for 4 credits and 8 credits in 7th semester and 8th semester respectively. 30% weightage will be given for midterm evaluation, 20% from supervisor and 50% weightage for end term project presentation.

A. Research based Project Evaluation

S.No.	Schedule	Evaluation parameters	Marks breakup	
I	7th Sem Mid-term Evaluation – *Sep'15*	Understanding of the project	25	200 Marks
		Literature survey	40	
		Project relevance and Expected Outcomes	10	
		Synopsis	5	
		Presentation	20	
II	7th Sem End-term Evaluation – *Nov'15*	Availability of tools and data sets	10	
		Understanding tools, data sets and their relevancy to the project	50	
		Topic selection and Feasibility	10	
		Presentation	20	
		Report	10	
III	8th Sem Mid-term Evaluation – *Feb'16*	Challenges and issues identified	40	400 Marks
		Methodology used	40	
		Implementation and validation	80	
		Progress Report	15	
		Presentation	25	
IV	8th Sem End-term Evaluation – *Apr'16*	Research Conclusion	60	
		Consistency and Justifications of results as per expected outcomes in first presentation	20	
		Evaluation of parameters	40	
		Presentation	40	
		Report	40	

B. Implementation based Project Evaluation

S.No.	Schedule	Evaluation parameters	Marks breakup	
I	7th Sem Mid-term Evaluation – *Sep'15*	Project Understanding	25	200 Marks
		Study of Existing Models/ Requirement gathering	40	
		Project relevance and Expected Outcomes	10	
		Synopsis	5	
		Presentation	20	
II	7th Sem End-term Evaluation – *Nov'15*	Availability and Understanding of tools/ platform	20	
		Project related specifications (DFDs, UCD etc.)	20	
		Database Design	20	
		Finalization of Topic, Project Plan (Gantt Chart) and Scope	10	
		Presentation	20	
		Report	10	
III	8th Sem Mid-term Evaluation – *Feb'16*	Challenges and issues identified	40	400 Marks
		Interface Design	40	
		Implementation	80	
		Presentation	40	
IV	8th Sem End-term Evaluation – *Apr'16*	Final Demonstration	60	
		Consistency and Justifications of results as per expected outcomes in first presentation	20	
		Testing Methodology	40	
		Presentation	40	
		Report	40	

6. Progress Log

Project groups are required to visit the supervisor at-least once in a week and supervisor will record his/ her comment on the specified place in the handbook **(Annexure – 1)**. Day and time of the week may be decided upon mutual consent of supervisor and project group students. Supervisor will also record the date while signing the log book. Dates will be counted for attendance purpose. Less than 70% attendance cases will be dealt as per University rule of short attendance.

Students are also required to carry this handbook at the time of evaluation of the project progress. Evaluation panel will also write comment/ suggestions in the specified place **(Annexure–2)**.

7. Documenting your Project

During the project, students are expected to submit one synopsis (one to two pages) along with two mid-term reports (in second and third presentation respectively) specifying the progress of the project.

To make the uniformity of the final project report, students may follow the guidelines given below for preparing the final project report. A sample report is also given in **Annexure–3**.

7.1 Report Size

The maximum number of pages of the final report should be preferably between 50-100 pages.

7.2 Paper Size

1. The standard size of paper of a Report is 21.5 cm (8½ inch) wide and 28 cm (11 inches) long.
2. Oversized figures and tables, if any, should be reduced to fit with the size of the report but the reduction should not be so drastic as to impair clarity of their contents. One may also fold these pages to fit with the report size.
3. It is suggested that the report be printed on one side of the paper.

7.3 Non-Paper Material

1. Digital or magnetic materials, such as CDs and DVDs, may be included in the report. They have to be given in a closed pocket in the inside of the back cover page of the report. It

should be borne in mind that their formats may become obsolete due to rapid change in technology, making it impossible for the Library to guarantee their preservation and use.

2. All non-paper materials, as above, must have a label each indicating the name of the student, the date of submission, and the copyright notice.

7.4 Page Numbering

1. Page numbers for the prefacing materials of the report shall be in small Roman numerals and should be centered at the bottom of the pages.
2. Page numbers for the body of the report should be in Arabic numerals and should be centered at the bottom of the pages. The pagination should start with the first page of Chapter 1 and should continue throughout the text (including tables, figures, and appendices)
3. In a double-sided report, each side of a sheet of paper should be counted as a page, even if the back side of a sheet of paper is blank.
4. In a double-sided report, the odd-numbered pages are always on the right and even-numbered pages are always on the left.

7.5 Binding

1. The report submitted for examination has to be softbound and printed on both sides. The reports should have, on their spines, the abbreviated title of the report, the name of the student, and the year of submission of the report.
2. After final evaluation, the comments, if any, may be incorporated in the report and required to submit one hardbound within a week to the department.

7.6 Format for the Report

After the text of the report is written, it is to be formatted in an appropriate manner for printing. The following guidelines are provided to format the report for easy readability.

7.6.1 Font

The preferred font size of the text in the report is 12 point, but in no case should it be less than 11-point. The minimum font size of materials within a table or a figure can be 8 point, however. The font size of chapter heading should be of 16 point and font size of sub heading can be chosen appropriately in the rage of 12 to 14. The preferred font type is Times New Roman.

7.6.2 Margins

A margin of 3.75 cm (1½ inch) is to be given on the binding edge while on the other sides it is to be 2.5 cm (1 inch). The text of the report, including headings, figures and tables but excluding page numbers, must be accommodated within the page area.

7.6.3 Line Spacing

1. The line spacing in the main text must be two. Single line spacing should be given for quotations, abstract, declaration, report approval, figure captions, table titles, figure legends, footnotes, and references.
2. Equations, tables, figures, and quotations should be set off from the main text with adequate space (not less than the normal line spacing adopted for the main text).
3. Two consecutive paragraphs should be separated by a spacing which must be larger than the line spacing adopted for the text.

7.7 The Prefatory Materials

7.7.1 Title of the Report

The title of the report should remain same as that given in the synopsis. Students need to ensure that they chose appropriate title that reflects the indication of what their project is about.

7.7.2 Cover Page

1. Cover page should contain the title of the report and the name of the candidate.
2. The spine of the report (when finally submitted after the Viva-Voce Examination) should be provided with an abbreviated title of the report, the name of the student, and the year of submission of the report. **(See Sample Page 1 for details.)**

7.7.3 Title Page (First Inner Page)

The title page (first inner page) should be similar to the cover page but should contain a few additional items. This page will not only bear the title of the report and the candidate's name, but also the name of the degree for which the report is submitted, the name of the Institute, month and year of submission of the report. **(See Sample Page 2 for details.)**

7.7.4 Certificate

A certificate page is to be included in the report and signed by respective supervisor to the effect that the data used for the work, the work depicted in the report, and the written material contained in the report are not copied from others and that due permission has been taken from, and due credit has been given to, the sources whenever they are used. (**See Sample Page 3 for details.)**

7.7.5 Acknowledgements

It should be limited, preferably, to one page. **(See Sample Page 4 for details.)**

7.7.6 Abstract

The abstract of the report should be limited to 200-300 words. A list of keywords should follow the abstract. **(See Sample Page 5 for details.)**

7.7.7 Table of Contents

Chapter numbers, chapter names, section numbers, section headings, subsection numbers, and subsection headings, along with the corresponding page numbers, should be given in the Contents. **Table of content given on sample page 6 is only for reference, students may delete or add chapters as per requirement of the report.**

7.7.8 List of Tables

A list of tables in the report, in proper format along with the page numbers is to be given after table of contents. **(See Sample Page 7 for details.)**

7.7.9 List of Figures

A list of figures in the report, in proper format along with the page numbers is to be given after table of contents. **(See Sample Page 8 for details.)**

7.7.10 List of Symbols and Abbreviations

All the symbols and abbreviations used in the report are to be given here along with their explanations and units of measurement (if applicable). **(See Sample Page 9 for details.)**

7.7.11 Body of the Report

The report should be written in either British or American English, not a mixed mode. However, because of increasing acceptance of both styles and blurring of the distinction between the two, what is important is that consistency should be maintained all throughout the text. **(See Sample Page 10-11 for details.)**

Note:

1. Indian authors often use both styles without knowing whether the style they follow while writing is American or British. Also many American words are increasingly included in British English Dictionaries (such as Oxford or Cambridge Dictionaries). Further, there are subtle differences in the British and American styles with regard to punctuation, abbreviations, quotations, etc., which are increasingly accepted by the proponents of both styles, and hence the distinction between them has blurred over the years.
2. The chapters should have numbers in Arabic numerals and should be written as Chapter 1, Chapter 2, etc. This should be followed by the title of the chapter (e.g., Introduction, etc.). The font size should be 14-point, bold for the titles.
3. Figures, tables, graphs should be positioned within the body of the text immediately after citation and should not be positioned separately.
4. Units should be in SI format.

7.7.12 References

References in the text should be in IEEE style i.e. reference number in square brackets. All references should be listed in references page in IEEE format. References should be arranged in the same order as appeared in the text of the report. **(See Sample Page 12 for details.)**

7.7.13 Appendices

Each appendix should be identified as Appendix A, Appendix B, etc. It should also have a title. The appendices and their titles should be listed in the Contents. Section and sub-section headings, equations, figures, and tables should be identified as A.1, A.2, etc., in accordance with their appearance in an appendix. It is not mandatory to include appendices in the report.

8. Supervisor's comments

Annexure - 1

Week no.	Supervisor's Comment (about general project progress and individual contribution towards the project)	Supervisor's Signature with date
WEEK 1		
WEEK 2		
WEEK 3		
WEEK 4		
WEEK 5		
WEEK 6		
WEEK 7		

WEEK 8		
WEEK 9		
WEEK 10		
WEEK 11		
WEEK 12		
WEEK 13		
WEEK 14		
WEEK 15		
WEEK 16		

WEEK 17		
WEEK 18		
WEEK 19		
WEEK 20		
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WEEK 23		
WEEK 24		
WEEK 25		

WEEK 26		
WEEK 27		
WEEK 28		
WEEK 29		
WEEK 30		
WEEK 31		
WEEK 32		
WEEK 33		
WEEK 34		

WEEK 35		
WEEK 36		
WEEK 37		
WEEK 38		
WEEK 39		
WEEK 40		
WEEK 41		

9. Evaluation Panel Comments

Annexure - 2

Evaluation	Comments and Signature
I 7th Sem Mid Term	Expected Outcome(s):
II 7th Sem End Term	
III 8th Sem Mid Term	
IV 8th Sem Final Presentation	Are the outcomes mentioned in 1st evaluation achieved? .....

<(Project report Cover) Sample Page 1>

A Project Report
on
THE TITLE OF THE REPORT SHALL LOOK LIKE THIS LINE

(The title is in Times New Roman Font with 16-point size, bold, one and a half line spacing)

Submitted by
<Student's Name> <Registration no.>
<Student's Name> <Registration no.>
<Student's Name> <Registration no.>

Department of CSE & IT
ITM University
Gurgaon

<(First Page) Sample Page 2>

A Project Report
on
THE TITLE OF THE REPORT ON THE SECOND PAGE SHOULD LOOK LIKE THIS

(Times New Roman, 16-point size, Bold and Centered)

submitted in partial fulfillment of the requirement for the award of the degree

(4 lines gap) (Times New Roman, 12-point size, Bold, Italics and Centered)

of

(1 line gap) (Times New Roman, 12-point size, Bold, Italics, and Centered)

Bachelor of Technology
in Computer Science Engineering and Information Technology

(1 line gap) (Times New Roman, 14-point size, Bold, (Centered)

by

(1 line gap) (Times New Roman 12-point size, Bold, Italics, and Centered)

<student name> <regd. no.>
<student name> <regd. no.>
<student name> <regd. no.>

(1 line gap) (Times New Roman, 14-point size, Bold, Centered)

Under supervision of
<Dr./Ms./Mr. Supervisor Name>
<Designation>

Department of CSE & IT
ITM University, Gurgaon
May 2016

(1 line gap) (Times New Roman, 14-point size, Bold, Centered)

<Sample Page 3>

CERTIFICATE

This is to certify that the Project Report entitled, "**Title of the Project**" submitted by "**Student 1, Student 2 and Student 3**" to **ITM University, Gurgaon, India**, is a record of bonafide Project work carried out by him/her under my/our supervision and guidance and is worthy of consideration for the award of the degree of **Bachelor of Technology** in **Computer Science Engineering and Information Technology** of the Institute.

Supervisor Name
Designation

Date: ……

<Sample page 4>

Acknowledgement

<Font Style Times New Roman, size -14>

<Font Style Times New Roman, Font size 12>

Name of Student 1 (Roll Number)
Name of Student 2 (Roll Number)
Name of Student 3 (Roll Number)

<Sample page 5>

ABSTRACT

Write brief abstract about the project. It should not more than 200-300 words.

Keywords:keyword1, keyword2…

<Sample page 6> (A typical specimen of table of contents)
<Font Style Times New Roman>

TABLE OF CONTENTS

<Sample page 7> (A typical specimen of list of tables)
<Font Style Times New Roman>

LIST OF TABLES

<Sample page 8> (A typical specimen of list of figures)
<Font Style Times New Roman>

LIST OF FIGURES

<Sample page 9> (A typical specimen of table of symbols and abbreviation)
<Font Style Times New Roman>

LIST OF SYMBOLS AND ABBREVIATIONS

ω	Angular velocity
DFD	Data flow diagram

<Sample page 10>

CHAPTER 1

INTRODUCTION

Write the introduction of the project.

1.1 Sub Heading 1

Write sub heading 1 of chapter 1.

<sample page 12>

CHAPTER N

NAME OF THE CHAPTER

Write the introduction of the project.

N.1 Sub Heading 1

Write sub heading 1 of chapter N.

<Sample page 12>

REFERENCES

[1] Mellema, Jos J., et al. "Distribution of coronoid fracture lines by specific patterns of traumatic elbow instability." *The Journal of hand surgery* 39.10 (2014): 2041-2046.

[2] Wong, Daniel J., et al. "Late onset venous thoracic outlet syndrome following clavicle non-union fracture: A case report." *Vascular* 23.2 (2015): 183-187.

[3] Cavalcante, Dalita GSM, et al. "Cytotoxic, biochemical and genotoxic effects of biodiesel produced by different routes on ZFL cell line." *Toxicology in Vitro* 28.6 (2014): 1117-1125.

[4] Title of web page: “The A5/1 Cracking Project", Available: [http://www.scribd.com]