

# Tutorial letter 101/0/2015

## Structural Steel & Timber Design III

(Project)

**SSD3602**

**Year Module**

**Civil and Chemical Engineering Department**

**IMPORTANT INFORMATION:**

This tutorial letter contains important information  
about your module.

BAR CODE

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## 1 INTRODUCTION

Dear Student

This tutorial letter serves as a guideline to this course. It provides you with general administrative information as well as specific information about the subject. Read it carefully and keep it safe for future reference. We trust that you will enjoy this course and find it important for the basis of your career.

## 2 PURPOSE OF AND OUTCOMES FOR THE MODULE

### 2.1 Purpose

The purpose of this module is to enable students to apply the theory learnt in Structural steel and timber design III to project work.

### 2.2 Outcomes

At the end of the project, the students should have acquired some skills in design relating to steel members and connections, load computation and the factors governing the economic success of every project and other influential things towards our designs.

## 3 LECTURER(S) AND CONTACT DETAILS

### 3.1 Lecturer

Lecturer: Mrs. M.S Mlasi

Physical address: GJ Gerwel Building, C-Block, Room C5-38, UNISA Science Campus,  
Florida

Telephone: 011 471 2547

Email address: [mlasims@unisa.ac.za](mailto:mlasims@unisa.ac.za)

Consultation times: Unisa office hours (08:00 – 16:00), on weekdays, strictly on appointment.

***Method of communication is via emails and/or telephonically.***

### **3.2 Department**

Department of Civil and Chemical Engineering

GJ Gerwel Building, C-Block, 5<sup>th</sup> Floor, UNISA Science Campus, Florida

Private Bag x 6

Florida

1710

Contacts: 011 471 2048/3132

General email address: [civil&chemical@unisa.ac.za](mailto:civil&chemical@unisa.ac.za)

### **3.3 University**

<http://www.unisa.ac.za>

## **4 MODULE-RELATED RESOURCES**

### **4.1 Prescribed books**

- South African Steel Construction Handbook. The South African Institute of Steel Construction (RED BOOK).
- eTOOLKIT
  - Author: South African Institute of Steel Construction
  - Year published: 2014 (You may purchase the latest copy or edition)
  - Contacts: 45 Empire Road, Melville, Johannesburg, 2109  
Email: [info@saisc.co.za](mailto:info@saisc.co.za)  
Tel: 011 726 6111
- You will receive lecture notes compiled in a disc, which will be posted to you. You should use these notes together with your study Guide throughout this course. You should

receive your notes during the first week of April 2015. If you have not received your notes by that time, please contact your lecturer as soon as possible.

- The following tools are also prescribed in order for the student to successfully complete the project:
  - Prokon: (Any edition)
  - AutoCAD/CAD: (Any edition)
  - Google

**Please note:**

You are expected to purchase your own **latest** copy of the prescribed book and the required tools. For contact details of official booksellers, please consult the list of official booksellers and their addresses in *my Studies @ Unisa*.

**4.2 Recommended books**

**Design Codes:**

- SANS 10162-1:2005: The structural use of steel - Part 1: Limit-state design of hot-rolled steelwork. ISBN 0-626-16165-7.
- SANS 10160-1989: The general procedures and loadings to be adopted in the design of buildings.

**Design Books (You may buy one or all of these books, if necessary):**

Author: Greg Parrott  
 Title: Structural Steel Design to SANS 10162:1 – 2005  
 Year published: 2005  
 Edition: 2<sup>nd</sup> (You may purchase the latest edition)  
 Publisher: Shades Technical Publications, Durban, South Africa

**OR**

Author: Dr. Jeffrey Mahachi  
 Title: Design of Structural Steelwork to SANS 10162  
 Year published: (You may purchase the latest copy)

Edition: (You may purchase the latest edition)

Contacts: Email: [maureenh@nhbrc.org.za](mailto:maureenh@nhbrc.org.za)

Tel: 011 317 0075

**OR**

Author: The South African Institute of Steel Construction

Title: The Structural Steel Connections (The Green Book)

Year published: (You may purchase the latest copy)

Edition: (You may purchase the latest edition)

Contacts: 45 Empire Road, Melville, Johannesburg, 2109

Email: [info@saisc.co.za](mailto:info@saisc.co.za)

Tel: 011 726 6111

#### **4.3 Electronic Reserves (e-Reserves)**

None

## **5 STUDENT SUPPORT SERVICES FOR THE MODULE**

Important information appears in your *my Studies @ Unisa* brochure.

The *myUNISA* system <https://my.unisa.ac.za> is a facility for registered UNISA students that enable students to perform study-related functions that are normally conducted by post, telephonically or by personal visits to the campus or via the Internet.

## **6 MODULE-SPECIFIC STUDY PLAN**

Use your *my Studies @ Unisa* brochure for general time management and planning skills.

## **7 MODULE PRACTICAL WORK AND WORK-INTEGRATED LEARNING**

There is no practical work for this module.

***All the project requirements are written in this Tutorial letter. The project must be passed before the final result can be released.***

## **8 ASSESSMENT**

### **8.1 Assessment plan**

Formative assessment will be the two assignments, as explained in Section 8.2 below.

#### **Subject components**

Structural steel and timber design III (Project) (SSD3PJT) consists of the following components. You must pass all the components to obtain credit for the subject:

<b>SUBJECT COMPONENTS</b>	<b>PERCENTAGE WEIGHT OF EACH SUBJECTS COMPONENT:</b>
Structural Steel and Timber Design III (Theory) <b>(SSD3601)</b>	70%
Structural Steel and Timber Design III (Project) <b>(SSD3602)</b>	30%
	100%

### **8.2 General assignment numbers**

The assignments are as follows:

Assignment 1: Project mentor form (Annexure D)

Assignment 2: The Project

This project comprises of different parts (report, calculations, drawings and Bill of quantities); which must be submitted as one assignment, at the same time.

Affidavit (Annexure C): It must be submitted together with the project (Assignment 2)

**Submission of both assignments is compulsory.**

The year mark is based on all the assignment marks obtained and their contribution towards the final year mark are as shown in the table below:

ASSIGNMENT NUMBER	CONTRIBUTION TOWARDS YEAR MARK/FINAL SUBJECT MARK	CONTRIBUTION TOWARDS EXAMINATION CREDIT
1 (Compulsory)	0 %	100 Credits
2 (Compulsory)	100%	0 Credits
<b>TOTAL</b>	<b>= 100 %</b>	<b>= 100 Credits</b>

Credit values are allocated to assignment. Students earn credits by submitting their assignments, duly completed. Submission of assignment 1 is the prerequisite for you participating in the project and the report being assessed.

### 8.2.1 Unique assignment numbers

Assignment	Unique Number
Assignment 1	571129
Assignment 2	571147

### 8.2.2 Due dates for assignments

Assignment	Submission Date
Assignment 1 (Annexure D)	Friday, 08 <sup>th</sup> of May 2015
Assignment 2 (Project and Annexure C)	Friday, 28 <sup>th</sup> of August 2015

**\*Both Assignments 1 and 2 are compulsory**

### 8.3 Submission of assignments

**Note:** The cut – off dates given here are the official, last dates on which a given assignment may be submitted. Students must adhere to these dates only. All other dates referring to cut – off submission dates for assignments, as may be posted on myUnisa or elsewhere, refers to administrative dates as managed by the Assignments Department and does NOT influence or change the above dates

You can submit your assignment:



- By post.
- Electronically through myUNISA

## 8.4 Assignments

### Assignment 2: Warehouse Project

#### Project Brief and Specifications

##### Warehouse project – General Arrangement

Figure 1 shows several aspects of the General Arrangement (GA) of a warehouse. The GA has been specified by the Lead Engineer in consultation with the Client. Certain details have been omitted on the GA drawing for you to determine. The number of purlins and side sheeting rails as well as their positions has been drawn schematically and has to be specified/ checked. The purlins and sheeting rails do not have to be designed/ sized.

The warehouse is located near OR Tambo International Airport in Kempton Park, Gauteng. You can assume open terrain for your wind loading.

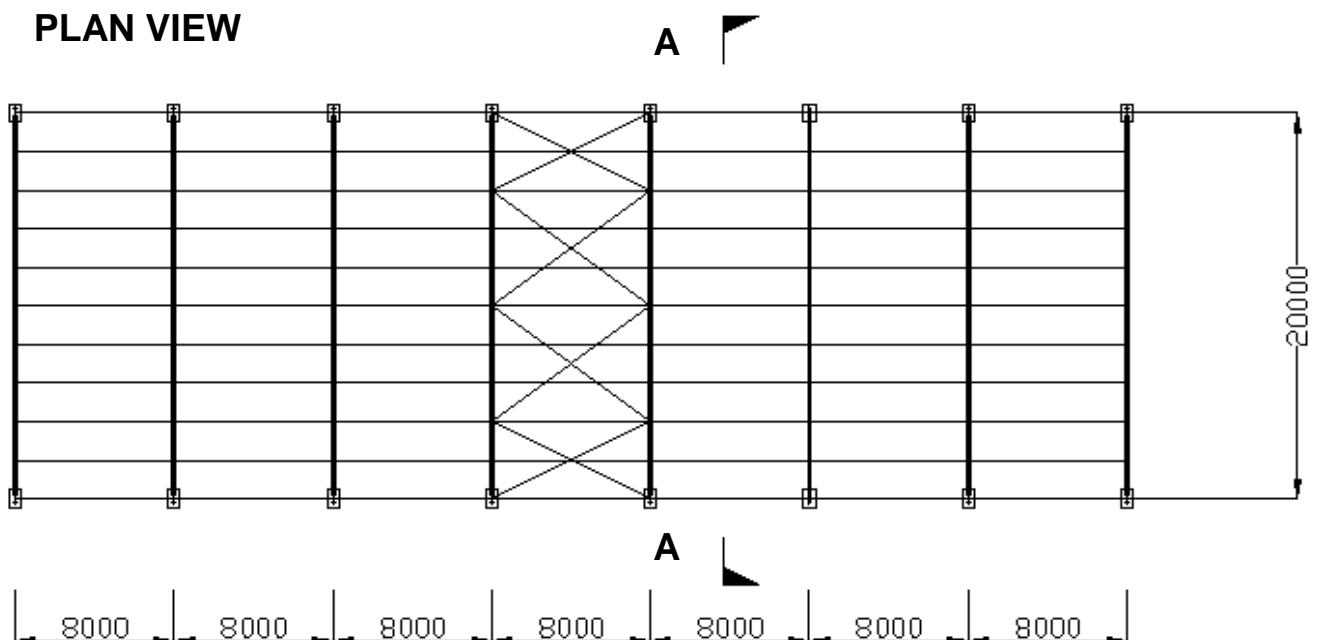
##### Warehouse project – Assumptions and Specifications

All concrete to have a cube crushing strength of  $f_{cu}=25\text{MPa}$ .

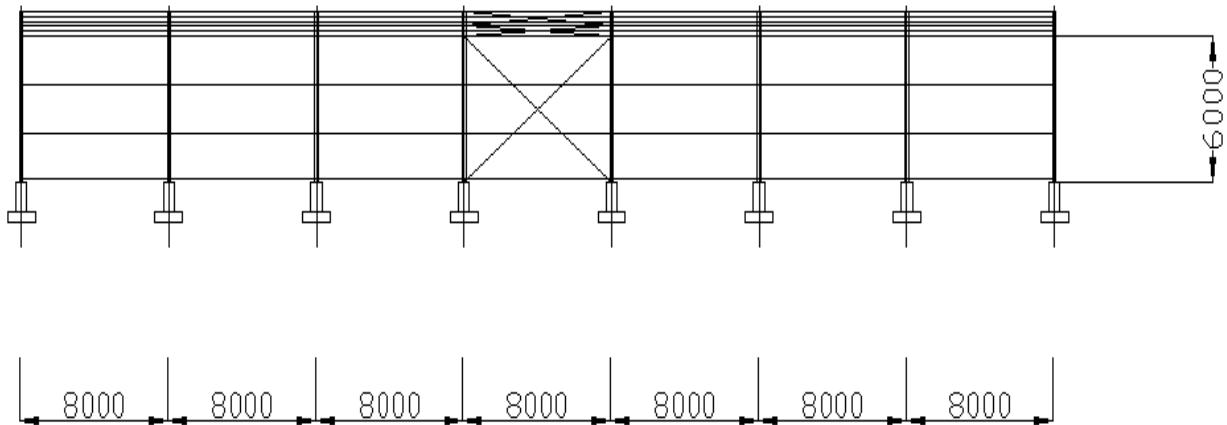
All steelwork is of grade: S355JR

Holding down Bolts are of commercial quality (CQ).

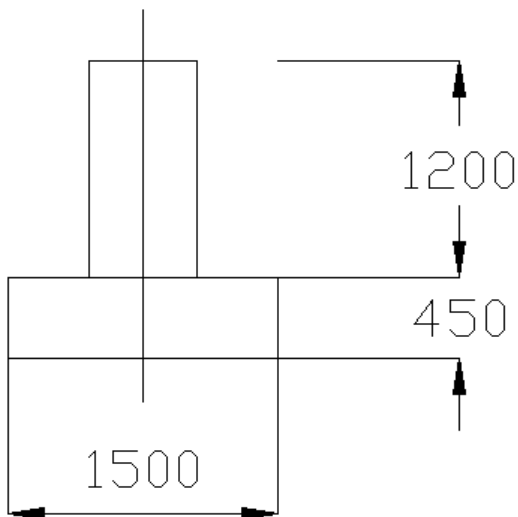
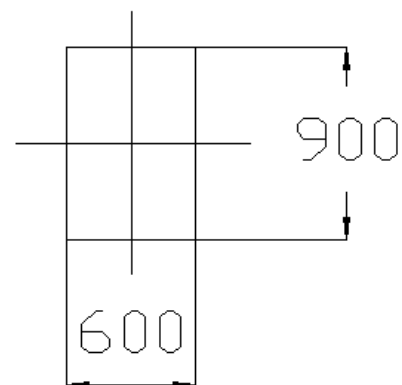
You can assume that the pitched roof portal frame is **pinned** at the bases.



**Figure 1(a):** Plan view of the warehouse. All dimensions in *mm*.

**ELEVATION**

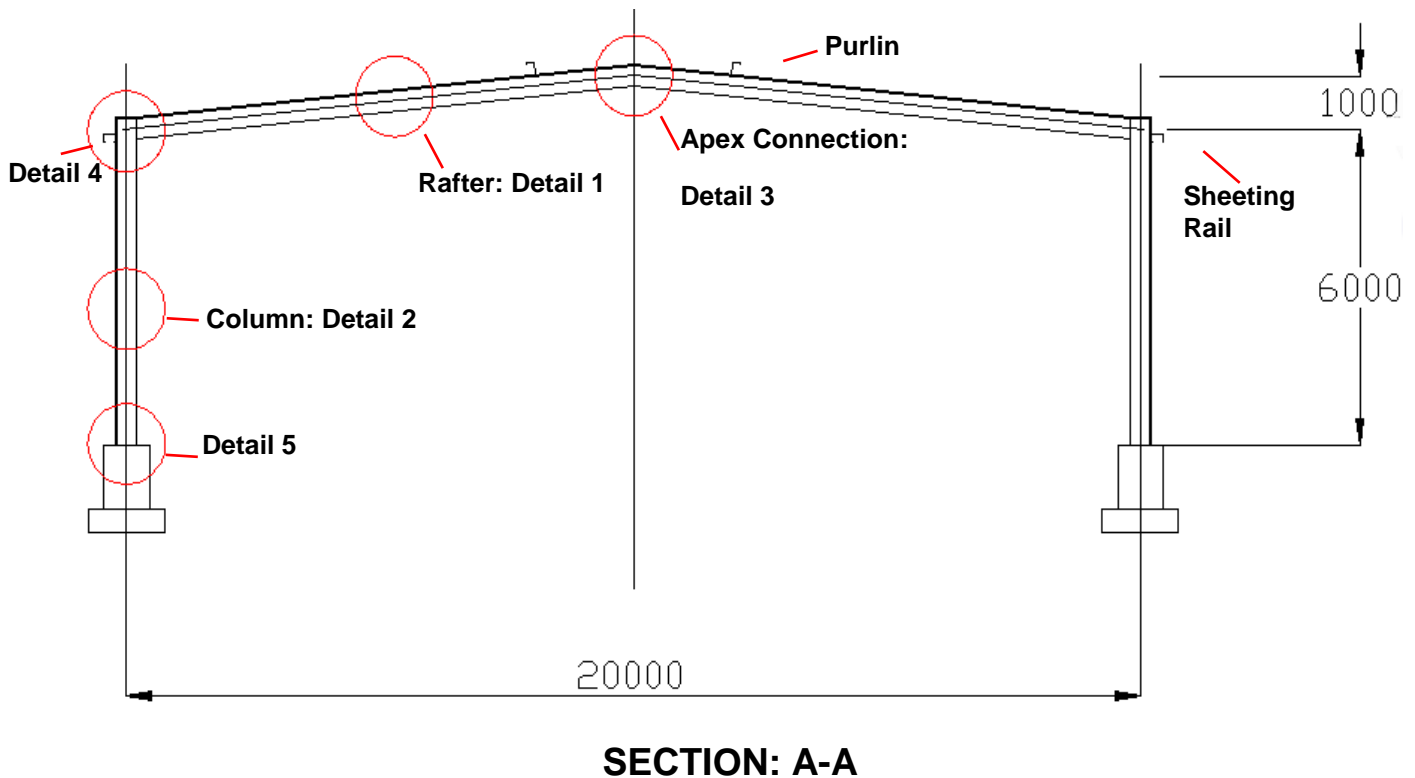
**Figure 1(b):** Elevation view of the warehouse. All dimensions in *mm*.

**PLINTH AND FOUNDATION****ELEVATION****PLINTH PLAN**

**Figure 1(c):** Typical concrete plinth and foundation. All dimensions in *mm*.

## Warehouse project – Member and Connection Design

Figure 2 shows a typical internal portal frame.



**Figure 2(a):** Typical pitched roof internal portal frame to be designed.  
All dimensions in *mm*. Not all purlins and sheeting rails shown.

You are required to:

- Determine the loads acting on the internal portal frame.
- Setup the relevant load combinations.
- Specify the spacing of the purlins and sheeting rails. (Do not design the purlins/ sheeting rails).
- Analyse the portal frame.
- Design the following members:
  - Rafter: Detail 1
  - Column: Detail 2
- Design the following connections:
  - Apex connection: Detail 3
  - Rafter to Column connection: Detail 4
  - Column to concrete plinth connection, including the Holding Down Bolts and the base plate: Detail 5

The steel sheeting to be used to cover the warehouse is: Supa-Clad IBR890 by Global Roofing Solutions (Pty) Ltd. (GRS)

### ***Hint***

To determine the loading on the pitched roof portal frame, you will need to determine and specify the spacing of the purlins and side sheeting rails. This can be done by considering the steel sheeting manufacturer's specifications. **Where necessary, assume reasonable values if not given! You are expected to take a minimum of 10 hours in this project.**

### **Design Report**

Succinct Report to contain (Typed, 3 pages maximum):

**[25 Marks; 2 Hours]**

- Title page
- Introduction and Project Scope
- Body of the report
- Discussion
- Conclusion

Design Calculations to contain (must be done on an Engineering Calculation Sheet and then attached to the succinct report as Appendix1):

**[40 Marks; 5 Hours]**

- Calculation of loads: Dead, Live and Wind Loads
- Load combinations.
- Design of members specified (**Please note that you are not allowed to use Prokon to design, but to analyse the structure. You will receive very poor marks should that happen.**)
- Design of connections specified  
(**You must use the eTOOLKIT to design the connections and attach the output print-out to the Succinct Report; otherwise you will be awarded poor marks.**)

Design Drawings (**A3 size**, Detailed **CAD** Drawings to scale, and must be attached to the Succinct Report as Appendix 2):

**[20 Marks; 2 Hours]**

Bill of Quantities (Typed, 1 page maximum, and must be attached to the Succinct Report as appendix 3):

**[15 Marks; 1 Hour]**

Prepare a Bill of Quantities, NOT more than 1 page. Every item used in Detail 1 to 5 must be listed in a Bill of quantities. Where possible, use the internet or call/visit the local manufactures of certain items that you used, and inquire about the prices so that you can have a good understanding before you do the Bill of quantities. Refer to Table 1 below, and use it as a guide for you Bill of quantities.

**Please note:**

Annexure A in this Tutorial Letter consists of a “General guide to report writing”, which is applicable to **ANY TYPE** of report in general. However, the Succinct Report that you must produce in this project is a **Technical** report.

**Important to remember:**

The professional report must be typed.

The report must be written in 3<sup>rd</sup> person.

Formal language must be used.

All tables and figures must be labeled and referred to in the report.

Pages must be numbered.

Table1: BOQ\_Example

Warehouse Project						
ITEM No	PAYMENT REFERS	SHORT DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SECTION 1: Detail 1</b>				
1.1						
1.1.1						
1.1.2						
etc.						
		<b>TOTAL FOR SECTION 1: CARRY FORWARD TO SUMMARY</b>				
		<b>SECTION 2: Detail 2</b>				
2.1						
2.1.1						
2.1.2						
etc.						
		<b>TOTAL FOR SECTION 2: CARRY FORWARD TO SUMMARY</b>				
		<b>SECTION 3: Detail 3</b>				
3.1						
3.1.1						
3.1.2						
etc.						
		<b>TOTAL FOR SECTION 3: CARRY FORWARD TO SUMMARY</b>				
		<b>SECTION 4: Detail 4</b>				
4.1						
4.1.1						
4.1.2						
etc.						
		<b>TOTAL FOR SECTION 4: CARRY FORWARD TO SUMMARY</b>				
		<b>SECTION 5: Detail 5</b>				
5.1						
5.1.1						
5.1.2						
etc.						
		<b>TOTAL FOR SECTION 5: CARRY FORWARD TO SUMMARY</b>				
		<b>TOTAL:</b>				

End of Project

Total Marks = 100

## **9 OTHER ASSESSMENT METHODS**

None

## **10 EXAMINATION**

There are no examinations for this course.

## **11 FREQUENTLY ASKED QUESTIONS**

The *my Studies @ Unisa* brochure contains an A-Z guide of the most relevant study information.

## **12 SOURCES CONSULTED**

The Prescribed Textbook and Design codes have been fully used in formulating the assignments and examinations relevant to this module.

## **13 CONCLUSION**

We wish you the best in your career, and we believe you find all the excitement in this project. We wish you all the best with your project, and feel free to explore other sources to better your understanding in this regard.

## **14 ADDENDUM**



**“ANNEXURE A”**

**BRIEF GUIDE TO REPORT WRITING**

**UNISA**

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## Description

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  - 1.1 Title
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- 2 SYNOPSIS
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  - 2.2 Key words
  
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- 6 INTRODUCTION
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  - 6.2 Scope and limitations
  - 6.3 Methodology
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## Description

- 7 BODY OF THE REPORT
  - 7.1 Literature review
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    - 7.2.2 Data acquired
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    - 7.2.4 Discussion
  
- 8 CONCLUSIONS
  
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13	WRITING THE REPORT
13.1	Format
13.2	General advice
13.3	Checking and editing
14	BIBLIOGRAPHY

## **1 COVER AND TITLE PAGE**

### **1.1 Title**

Use large capital letters for the title, which should be as short and compact as possible, while still giving enough information to accurately identify what the report deals with. Avoid phrases like "a report on investigations into . . . .", as these add nothing relevant to the title.

### **1.2 Author**

The name of the author must be shown on the cover, together with the author's affiliation or the name of the organisation that will publish the report. This may include a logo.

### **1.3 Date of report**

The date is usually placed at the bottom of the cover and may be the full date of issue of the report or only month and year.

### **1.4 Place**

The city or town (and country) where the headquarters of the issuing organisation may be found is shown on the cover or on the following title page.

### **1.5 Title page**

The title page is virtually identical to the cover but may contain additional information like the ISBN number, the publisher, printer, place of publication and year of issue.

## **2 SYNOPSIS**

### **2.1 Executive summary of the report**

The Executive Summary states the problem, the main findings, conclusions and recommendations in a concise form. Potential readers can scan the summary and decide if the report interests them or if it contains relevant information for them. The executive summary may be as short as 200 words for a short report or as long as three pages for a substantial report.

### **2.2 Key words**

A short list of key words must be given to enable an electronic search to correctly identify the subject matter of the report. Careful thought is required to choose relevant and important key words. Include the field of study and the section covered in the report:

eg engineering, road, design or

e.g. engineering, water, quality

## **2 ACKNOWLEDGEMENTS**

**3** All substantial assistance received in the work reported upon and in the preparation of the report should be acknowledged. It is usual to acknowledge financial assistance, permission to publish and special facilities provided.

Acknowledgement of another person's work, published or unpublished, should be given in the references at the end of the report.

## **4 CONTENTS**

### **4.1 Description**

The contents should be given on a separate page and should strictly follow the structure of the report, listing the headings and the page numbers. It is usual to list only the first three levels of headings. The contents list is commonly divided into four sections:

contents

figures

tables

appendices

## **4.2 System of headings**

The system recommended is as follows:

- First level headings, chapter or section headings, are numbered consecutively beginning with 1.
- Second level headings, being important subdivisions of the chapter or section, are numbered consecutively beginning with 1 within that section.
- Third level headings are numbered consecutively within the second level subdivision.
- Any further headings that might be required are not numbered. See the example below.

Example:

### **1 FIRST LEVEL HEADING**

#### **1.1 Second level heading**

##### **1.1.1 Third level heading**

##### **Fourth level heading**

**Fifth level heading.** This leads straight into the text.

Italics can be used for the fourth and fifth level headings, if preferred.

## **5 SYMBOLS, NOMENCLATURE, GLOSSARY**

### **5.1 Symbols**

A list of symbols used in the report should be given in alphabetical order and should follow common practice within the field of study.

## **5.2 Nomenclature**

Here should be listed commonly used abbreviations and acronyms. Alternatively, the abbreviations or acronyms can be defined in the text where they first appear. Avoid the extensive use of acronyms: rather spell out the words in full than dish up an "alphabet soup", which makes reading of the text difficult.

## **5.3 Glossary**

A glossary is an alphabetical listing of words and phrases that are unique to the field of study. The glossary serves to speed up the reading and understanding of the text by supplying a handy "dictionary".

# **6 INTRODUCTION**

The introduction should be subdivided as follows:

## **6.1 Problem statement**

The problem, hypothesis or purpose of the study should be stated clearly and concisely. This can usefully be followed by a paragraph that establishes the importance of the problem and its context.

## **6.2 Scope and limitations**

The scope and limitations of the study or report should be given at this stage, so that the reader has clarity about the breadth of subject matter covered. This step also has the advantage of focussing the attention of the writer onto the subject and avoiding the allure of side issues of little importance.

## **6.3 Methodology**

The *broad approach* used in the work should be given here. If standard procedures were followed, then reference should be made to them.

If the work covered by the report is largely experimental, then a comprehensive description of the procedure followed in the work should be made in the body of the report, or even in each chapter in the body of the report.

#### **6.4 Summary of the content of each subsequent chapter**

This summary should be a preview of the rest of the report, briefly showing how the report has been structured. Note that the structure must form a logical progression and should not necessarily be in the chronological order in which the work was carried out.

### **7 BODY OF THE REPORT**

#### **7.1 Literature review**

The literature review should give the history and present status of the problem by a brief review of previous investigations. Their contribution to present understanding of the problem should be made clear.

The literature review must be properly supported by references.

It may be useful at this stage to summarise accepted theory and give the relevant assumptions and equations.

#### **7.2 Investigation**

##### **7.2.1 Test methods**

The methods used in the investigation should be described in sufficient detail so that the interested reader is able to duplicate the results. In particular, any special precautions or special

apparatus should be described. Drawings can be placed in the appendix and referred to in this section.

### **7.2.2 Data acquired**

If relevant the raw data can be tabulated. However, if voluminous, it is better to show only processed data or summaries of the data here and to keep the raw data for an appendix. It is critically important to fully describe how the data was processed (equations used, computer programme used, etc).

### **7.2.3 Analysis**

The analysis of the data should be fully described and the results given. The format of the results needs some thought, as tables, though perhaps necessary, are not easily interpreted to show trends. Graphs, drawn at sensible scales, can be used to illustrate trends, peak values and minimum values.

Students should be aware of the importance of the analysis of the data. From the literature survey certain results should be expected. If these are not apparent, careful analysis of the data should show why the expected results have not come about. If this is due to faulty testing it must be investigated and corrected.

### **7.2.4 Discussion**

Discussion of the test methods, the data and the analysis should be undertaken systematically and presented in a clear and orderly fashion. Reasons must be given for anomalies found, even if these are tentative. Should further testing be necessary to prove or disprove the tentative reasons given, then say so and indicate how further testing should be structured.

Criteria used for making decisions must be made clear to the reader and should be based on the problem statement and objectives. Such criteria simplify drawing conclusions from a mass of data.



Conclusions should be put into the next section or chapter. However, if the report deals with disparate subjects, they can be dealt with under separate headings, each structured as above with section conclusions.

## **8 CONCLUSIONS**

The conclusions of the study should be given in this section, restating the developments and findings of the previous chapters, but avoiding further discussion. If appropriate, this section can be a "Summary of Conclusions" presented in order of importance.

If the study was inconclusive, i.e. no conclusions can be drawn from the study, this should be stated and some recommendation made on how the study should be amended.

For a short report, recommendations resulting from the study should be given in this section. A substantial report would show the recommendations in a separate section.

## **9 RECOMMENDATIONS**

Recommendations arising from the study should be given, suitably motivated and explained. As the objective of a report is usually an action, the action desired by the author should be given in the recommendations.

## **10 REFERENCES**

References should be chosen to

- give the source of the writer's statements
- acknowledge another person's work
- provide additional and relevant information

All references quoted in the report must be listed. The Harvard System of listing references is preferred and is illustrated below. The author and the year are shown in the text (eg. Bolton, 1981) and the full reference is given in the reference chapter.

Journal entries:

Bolton, W T. A lesson in interactive television programming. *Journal of Library Automation*, vol.14, no.2, Feb.1981, pp.103-108.

Books:

Segre, E. editor. *Experimental Nuclear Physics*, 1st edition. New York: Wiley, 1953, vol.1, pp.6-10

Conference proceedings:

Smith, K A and Waller, A A. *New paradigms for engineering education*. Pittsburgh: ASEE/IEEE Frontiers in Education Conference Proceedings, 1997.

## **11 BIBLIOGRAPHY**

Background reading is often referenced in the Bibliography, but is not referred to in the text of the report. Entries in the Bibliography should follow the same Harvard System as the references.

## **12 APPENDIX**

The appendices are used for information pertinent to the report but too bulky to be placed in the text. They are particularly useful for information that would otherwise interrupt the flow of the report.

Raw data can be shown in an appendix if necessary for completeness. Note that raw data is sometimes too bulky for inclusion in an appendix and is unnecessary for a proper understanding of the study. In this case processed data should be shown in an appendix and only summaries put into the body of the report.

Additional information that would support the report can be shown in an appendix.

## **13 WRITING THE REPORT**

### **13.1 Format**

The report should be typed in 1½ line spacing, with at least 25 mm margins, using 10 point or 12 point typeface (12 pt preferred) and printed on one side only of A4 paper. Spelling should follow the Oxford Dictionary. Do not use full stops after abbreviations or acronyms.

Type equations carefully and clearly, preferably in such a fashion that minor formatting changes will not destroy the format of the equation.

Number all tables and figures, so that reference can be made to any specific one. Table headings can be numbered for clarity if appropriate.

Use the spell checkers available with all word processor software, first setting the correct language to "South African English". The default US (American) settings should be avoided. If a grammar and language style check is available, use it once the first draft of the report has been written and is being edited.

### **13.2 General advice**

When researching the literature, note the full reference details of every book and journal article, including page numbers, so that these can be checked at any stage if and when additional information is required. It is easier to delete a few references than to reread a book or a series of journals while searching for specific information.

When performing an extended series of tests, do not leave the calculation of results till the end. Complete the calculations during the testing and make sure that the results behave as expected. If they don't, the testing procedures can be amended to eliminate spurious results. If calculation is left to the end, a whole series of tests may have to be repeated or even abandoned.

### 13.3 Checking and editing

Editing is a process of critical evaluation and should include:

- Accuracy: the report must be accurate and free from ambiguity and bias.
- Brevity: irrelevant wording and unnecessary detail must be eliminated.
- Clarity: the report must be easy to read, well structured with a logical flow of statements and ideas. Part of the logical flow is to ensure that the problem statement, analysis of the data, discussions and conclusions are all about the same subject, that they hang together and progress logically from one to the next.
- Emphasis: attention must be drawn to significant information. This should not be left to the reader but must form part of the report.

## 14 BIBLIOGRAPHY

Bruckmann C G and Mandersloot W G B. *Writing Informative Reports*. CSIR, Pretoria, April 1984.

Faculty of Engineering. *Guide for the preparation of theses, dissertations and project reports*. University of the Witwatersrand, Johannesburg, Dec 1990, revised Dec 1994.

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**"ANNEXURE C"**

**STRUCTURAL STEEL AND TIMBER DESIGN III (PROJECT) (SSD3602)**

**AFFIDAVIT**

I, ..... hereby declare that this project is my own work.

SIGNED: .....

NAME IN BLOCK LETTERS:.....

STUDENT NUMBER: .....

CONTACT NUMBERS:

TEL: .....

CELL:.....



## ANNEXURE D – PROJECT MENTOR FORM

PLEASE COMPLETE IN CLEAR BLOCK LETTERS AND SUBMIT AS ASSIGNMENT 1

**TO** : Mrs. M.S Mlasi

**STUDENT INITIAL AND SURNAME:** .....

**STUDENT NO** : .....

**TEL NO** : ..... (WORK)

**TEL NO** : ..... (HOME)

**CELL** : .....

**E-MAIL** : .....

SUBJECT NAME & CODE	INSTITUTION	MENTOR INITIALS, SURNAME & TEL NUMBER	
STRUCTURAL STEEL AND TIMBER DESIGN III (SSD3602)			Signature  .....

- I confirm that I have discussed all aspects of the project with the mentor from ..... (name of institution) and that UNISA will in no way be liable for any costs with respect to this project.

\_\_\_\_\_  
SIGNATURE OF LEARNER

\_\_\_\_\_  
DATE