GUIDELINES FOR REPORT WRITING

D84 PROJECT WORK REPORT

* Paper size : A4size (good quality white paper)
* Title page : Title should be typed with a font size of 18 in capital letters; the name of the department and the D84 Project with a font size of 16; the name of the college and place in with a font size of 20 and all other text with a font size of 14 in the title page.
* The title page, certificates, list of papers published/presented, if any, acknowledgement, list of contents, list of symbols, list of figures, list of tables and abstract, kept in this sequence should be numbered in small roman letters.
* Margins:
  + Top and bottom edge : 25 mm
  + Left side : 35 mm
  + Right side : 25 mm
* Font : The font for the entire report is 12 font Times New Roman, The paragraph should begin with a tab of 10 mm.

**GENERAL CONTENT OF PROJECT REPORT**

|  |  |
| --- | --- |
| **CHAPTERS** | **CONTENT** |
| INTRODUCTION | Basic concepts, scope and importance of the problem |
| LITERATURE REVIEW | Detailed survey of the relevant/related literature |
| PROBLEM DESCRIPTION | Covering problem environment, objectives, assumptions, and definition. |
| METHODOLOGY / EXPERIMENTAL SET-UP | Existing practice for the problem and proposed methodology / set-up with justification. |
| PRESENT WORK | Procedure to illustrate the concept, methodology and set-up (experimental) with numerical data. |
| RESULTS AND DISCUSSIONS | Results and Discussions |
| CONCLUSION | Conclusions |
| REFERENCES | References in the standard format prescribed |
| APPENDIX | If any |

* The chapter titles should be typed in 16 font size BOLD CAPITAL LETTERS numbered as 1, 2, etc..
* The sections headings should be 14 FONT - CAPS – BOLD. For example the sections in chapter 1 numbered as 1.1, 1.2, etc.
* The sub sections headings should be as 14 FONT – Title Case- BOLD. For example the sub sections in section 1.1 numbered as 1.1.1, 1.1.2, etc.
* The text of the report should be typed in Times New Roman, font size 13 with 1.5-line spacing.
* The page numbers in numerals should be typed on the bottom right corner of the page in alignment with the paragraph, starting from the INTRODUCTION CHAPTER onwards.
* The reference should be indicated as follows:
  + Jawahar et al (1998) proposed a method of . . ….
  + Selective assembly is used to obtain high precision mating part tolerances from relatively low precision components (Kannan, 2001).
  + Sornakumar et al (2001) developed a method . . . . .
* The figures should be numbered with relevant to the chapters. For example, figure 4.2 is the second figure in the fourth chapter. Every figure should have a caption in bold letters. It should be typed with the figure number below the figure left justified to the figure (in small letters with title case).
* The tables should be numbered with relevant to the chapters. For example Table 3.1 is the first table in the third chapter. Every table should have a caption in bold letters. It should be typed with the table number above the table left justified to the table (in small letters with title case).
* The equations should also be numbered and should be shown at the right end close to the margin as . . . . .(1.5)

For example 1.5 is the 5th equation in Chapter 1.

* The expansion of all abbreviations and symbols should be given at its first occurrence in the report.
* **The minimum number of pages for the report is 40 and the maximum is 100.**
* **The cover should be printed in black letters and the text for printing should be identical with the sample cover page.**
* **Number of Hard Copy: Total number of students in a batch + One copy**
* **Soft copy: One copy (CD)**
* **The report should be bound using flexible cover of thick white art paper. The cover page for the thesis should be laminated. The cover should be printed in black letters and the text for printing should be identical with the sample page. The spine of the binding should be of, black calico cloth for B.E. Electronics and Communication Engineering and of 20 mm width.**
* The student and the guide should sign at the places provided in the certificate.
* References (Alphabetical order)

-**The minimum number of pages from the first to the last chapter should be 40.**

A GENETIC ALGORITHM FOR FLOW SHOP ASSEMBLY

# D84 Project

*Submitted in partial fulfillment for the requirement of B.E. degree in Electronics and Communication Engineering of Anna University*

#### Submitted by

##### XXXXXXXXXXX

***(Reg. No: 13D XX)***

***(Reg No:13DXX)***

#### Guided by

## ***Dr/Prof. XX.XXXXXXX***



# *Department of Electronics and Communication Engineering*

### **THIAGARAJAR COLLEGE OF ENGINEERING**

(An Autonomous Institution Affiliated To Anna University, Chennai)

**MADURAI – 625 015**

***April 2017***

###### **THIAGARAJAR COLLEGE OF ENGINEERING**

**(An Autonomous Institution Affiliated to Anna University, Chennai)**

**MADURAI – 625 015**



BONAFIDE CERTIFICATE

This is to certify that the D84 Project entitled “xxxxxx xxxxx”, being submitted by Y. *X.XXXXXX* (Register Number 13DYY), Y. *X.XXXXXX* (Register Number 13DYY) and Y. *X.XXXXXX* (Register Number 13DYY) in partial fulfillment for the requirement of Bachelor of Engineering Degree in Electronics and Communication Engineering, is a record of bonafide work done by them/him/her during the year 2016-2017 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

Y.YYYYYYY Dr.Mrs.R.Sukanesh, M.E.,Ph.D

(Designation) Professor and Head,

Department of ECE, Department of ECE,

(Guide)

Station: Madurai Date:

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

INTERNAL EXAMINER EXTERNAL EXAMINER HDECE

LIST OF PAPERS PUBLISHED/PRESENTED

[1] J. Van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, J. Sci. Commun. 163 (2000) 51-59.

[2] W. Strunk Jr., E.B. White, The Elements of Style, third ed., Macmillan, New York, 1979.

[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), Introduction to the Electronic Age, E-Publishing Inc., New York, 1999, pp. 281-304.

[4]M.N.Rajkumar, "Genetic Alogorithm for Flow Shop,Proceedings of the International Conference on Operations Management for Global Economy Challenges & Prospects, IIT, New Delhi, 1999, pp.21-32.

ACKNOWLEDGEMENTS

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**LIST OF SYMBOLS**

|  |  |
| --- | --- |
| **Symbol** | **Description** |
| C | Completion Time Of Last Operation Job |
| t | Processing Time |
| ρ | Pheromone Trail Value |
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**ABSTRACT**

The Abstract containing the brief introduction about the basic concepts, problem description, methodology/experimental set-up, present work, results & discussions and conclusions can be approximately 1 page.

**CHAPTER 1**

# INTRODUCTION

**1.1. INTRODUCTION**

Quality is an important aspect of any manufacturing process. Only high quality products can survive in the market. The customer not only wants quality, precision and trouble free products, but he wants them for an attractive price. The American Society for Quality Control defines quality as “The totality of features and characteristics of a product or service that bears on its ability to satisfy a user’s given needs. When a product consists of two or more components, being assembled then the quality of that product depends upon the quality of assembly. The quality of an assembly depends on the quality of the parts being assembled. The component of an assembly will have many quality characteristics. The component quality characteristics that contribute for the assembly, decides the quality of that assembly. The quality of the assembly depends on the resulting tolerance. The resulting tolerance is the result of variation in the component quality characteristics. Therefore, the variations in component quality characteristics play a major role in the quality of assembly.

**1.1.1. Variability**

In nature, two extremely similar things are difficult to obtain. If at all we come across exactly similar things, it must be only by chance. This fact holds good for production process as well. No production process is good enough to produce all items of products exactly alike. In all manufacturing process, manufacturing of components with zero variation is practically not possible. All the components in a same manufacturing line will differ one or the other. Therefore, the variability is inevitable in any manufacturing process.

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Sel –X Asx’, Pramana – Journal of Physics Vol.42, No.1, pp.421-425.

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