Assignment 01 Workstudy and Method Engineering IE223.docx

by MOHAMMAD ABUBAKAR ATIQ MUHAMMAD ATIQ BUTT

Workstudy and Method Engineering IE223

Assignment 01

Name: Mohammad Abubakar Atiq

F2022031002

Program: BS Industrial Engineering

Department of Mechanical Engineering

Resource Instructor: Sir Rehan

Table of Contents

Brief history of workstudy and methods engineering, and its tools and techniques discovered.

Introduction

The field of methods engineering and time study includes designing, creating, and selecting the best manufacturing methods, processes, tools, equipment, and skills to manufacture a product after working drawings have been released by the product engineering section.

Brief overview of work study and methods engineering

Methods engineering implies the utilization of technological capability mostly as a result of productivity gains and method engineering.

Importance in industrial efficiency and productivity

Productivity growth is the only way for a corporation or enterprise to expand and become more profitable. The improvement in production per work-hour or time expended is known as a rise in productivity. The fundamental tool whose use results in increased productivity is methods, time study, and wage payment.

Historical development

1. The work of Taylor
2. Motion study and the work of the Gilbreths

Tools and techniques

Methods engineers usually use eight different process charts, each of which has specific applications.

1. Operation process chart.
2. Flow process chart
3. Flow diagram
4. Worker and machine process chart
5. Gang process chart
6. Operator process chart
7. Travel chart
8. PERT chart

Time study

The actual taking of a time study is both an art and a science. To find specific time required to do a task by labor, time study is taking place. There are certain elements of time study such as selecting the operator, analyzing the job and breaking it down into its elements, performance rating the operator, assigning allowance (personal, relaxation etc.).

Motion study

The meticulous examination of the many bodily motions used to perform a task is known as motion studies. Its purpose is to eliminate or reduce ineffective movements and to facilitate and speed effective movements. In the broad sense, motion study is covered by two degrees of refinement that have wide industrial application. This includes work system analysis and design for increased productivity and efficiency. Motion study examines the tasks to find the best configuration of tools, machinery, and motions to increase output. By illuminating workplace safety and human-machine interaction, this field of study has significantly advanced ergonomics and industrial engineering. In keeping with the objective character of motion studies itself, the passive language highlights the action and its impact rather than the person.

The laws of motion economy

1. The use of the human body
2. The arrangement and conditions of the workplace, etc.

Work sampling

Work sampling is a technique by which the proportions of total time devoted to the various activities that constitute a job or work situation are investigated. The results of work sampling are effective for determining allowances applicable to the job, for determining machine and personnel utilization, and for establishing standards of production.

Assignment 01 Workstudy and Method Engineering IE223.docx

36%
SIMILARITY INDEX

33%
INTERNET SOURCES

13%
PUBLICATIONS

27%
STUDENT PAPERS

PRIMARY SOURCES

1	www.termpaperwarehouse.com Internet Source	13%
2	www.coursehero.com Internet Source	9%
3	ia801309.us.archive.org Internet Source	8%
4	Submitted to University of Warwick Student Paper	4%
5	dokumen.pub Internet Source	1%

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		

Assignment 01 Workstudy and Method Engineering IE223.docx

Sp. This word is misspelled. Use a dictionary or spellchecker when you proofread your work.

Sp. This word is misspelled. Use a dictionary or spellchecker when you proofread your work.

Sp. This word is misspelled. Use a dictionary or spellchecker when you proofread your work.

Sp. This word is misspelled. Use a dictionary or spellchecker when you proofread your work.

Missing "," You may need to place a comma after this word.

Hyph. You may need to add a hyphen between these two words.

Sp. This word is misspelled. Use a dictionary or spellchecker when you proofread your work.

Missing "," You may need to place a comma after this word.

Missing "," You may need to place a comma after this word.

P/V You have used the passive voice in this sentence. Depending upon what you wish to emphasize in the sentence, you may want to revise it using the active voice.
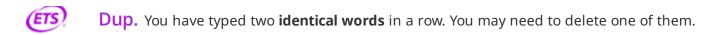
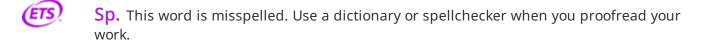**Article Error** You may need to use an article before this word. Consider using the article **a**.

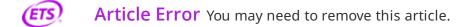**Missing ","** You may need to place a comma after this word.

Article Error You may need to use an article before this word. Consider using the article **the**.

Dup. You have typed two **identical words** in a row. You may need to delete one of them.

Sp. This word is misspelled. Use a dictionary or spellchecker when you proofread your work.

Article Error You may need to remove this article.

Article Error You may need to remove this article.

Missing "," You may need to place a comma after this word.

Missing "," You may need to place a comma after this word.

Article Error You may need to remove this article.

P/V You have used the passive voice in this sentence. Depending upon what you wish to emphasize in the sentence, you may want to revise it using the active voice.

Missing "," You may need to place a comma after this word.

Confused You have used **personnel** in this sentence. You may need to use **personal** instead.