



Jomo Kenyatta University of Agriculture and Technology

College of Engineering and Technology

School of Mechanical, Materials, and Manufacturing Engineering

Department of Mechatronic Engineering

iPic Laboratory - Rapid Prototyping

Practical Report

Bernie Kiplelgo Cheruiyot (ENM221-0054/2017)

Mogire Earl Spencer (ENM221-0077/2017)

June 10, 2022

1 Introduction

1.1 Background

(Insert your content)

gghjbbnmmm

1.2 Problem statement

(Insert your content)

1.3 Objectives

(Insert your content)

1.4 Justification of the study

(Insert your content)

2 Literature Review

Itemization

- Item 1.
- Item 2.
- ...

$$\dot{x} = Ax + Bu + B_d w \tag{2.1}$$

Referring a chapter in the main text. For instance Chapter 2

$$E = 210000 \frac{\text{N}}{\text{mm}^2}$$

$$\rho = 7,85 \frac{\text{g}}{\text{cm}^3} = 7850 \frac{\text{kg}}{\text{m}^3}.$$

$$\Delta \boldsymbol{r}_k = \boldsymbol{r}_{\text{GBE}_k} - \boldsymbol{r}_{\text{C}_k} = (x_{\text{GBE}_k} - x_{\text{C}_k}, y_{\text{GBE}_k} - y_{\text{C}_k})^T = (\Delta x_k, \Delta y_k)^T \tag{2.2}$$

$$k = 2 \dots n$$

$$||\boldsymbol{r}_{\text{GBE}_k} - \boldsymbol{r}_{\text{C}_k}|| \leq r_{kj}, \tag{2.3}$$

$$k \ j$$

Table 2.1: Caption for the table should be at the top of the table

It can also overflow to next line

First column	Second column	Third column
1	2	4
4	6	23
34	2	0

$$\text{rank } \mathbf{Q}_B = \text{rank} \begin{bmatrix} \mathbf{C} \\ \mathbf{CA} \\ \mathbf{CA}^2 \\ \vdots \\ \mathbf{CA}^{n-1} \end{bmatrix} = n.$$

(2.4)

$$K_\varphi \; = \; 3.64 \; \frac{\text{V}}{\text{rad}} \quad \text{and}$$

(2.5)

$$K_x \; = \; 28.32 \; \frac{\text{V}}{\text{m}}.$$

(2.6)

2.1 Name of a subsection

q_1, q_2 and q_3 (see Fig. ??).

2.2 Another subsection

3 Methodology...

This is

4 Expected Outcomes

References

- [1] J. Njiri and D. Söffker, “State-of-the-art in wind turbine control: Trends and challenges,” *Renewable and Sustainable Energy Reviews*, vol. 60, pp. 377–393, 2016.
- [2] T. Kane and D. Levinson, *Dynamics: Theory and Applications*. McGraw-Hill Book Company, New York, 1985.