An Undergraduate Thesis on

# THESIS TITLE

Course No: NAME 400

By

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and

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Supervised By Professor’s Name Designation

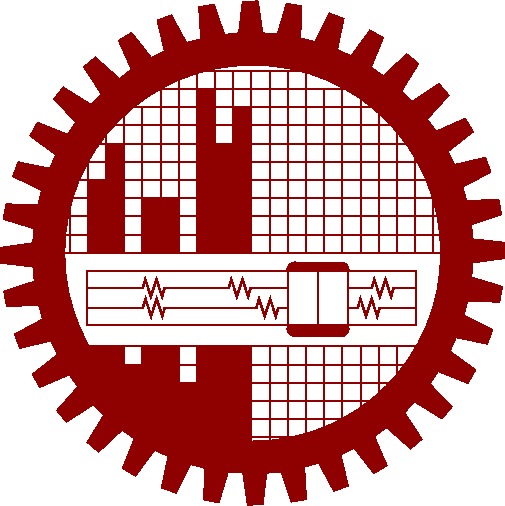
Department of NAME, BUET

Submitted to the

Department of Naval Architecture and Marine Engineering, Bangladesh University of Engineering and Technology,

In partial fulfillment of the requirements For the degree of Bachelor of Science In

Naval Architecture and Marine Engineering



October 2024

Department of Naval Architecture and Marine Engineering, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh[-2mm]

# DECLARATION

This is to certify that the work presented in the thesis is carried out by the authors under the supervision of Dr.Name of the supervisor, Department of Naval Architecture and Marine Engineering, Dhaka. No portion of the work contained in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or institution of learning.

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**DEDICATION**

This thesis is dedicated to .............

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**ABSTRACT**

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**NOMENCLATURE AND ABBREVIATIONS**

*𝐶𝑑* Drag Coefficient

*𝐶𝑙* Lift Coefficient

*𝑅𝑒* Reynolds Number

**Chapter 1**

# INTRODUCTION

### Background and Present State

Insert text here. For example, this refers to a paper [Ali and Bogna´r](#_bookmark44) ([2024](#_bookmark44)). Two or more papers can be cited as ([Ali and Bogna´r](#_bookmark44), [2024](#_bookmark44); [Mohammadpour et al.](#_bookmark45), [2024](#_bookmark45)). You can insert an equation. One example is

*𝐶𝑑* =

2*𝐹𝑑* (1.1)

*𝜌𝑈*2 *𝐴*

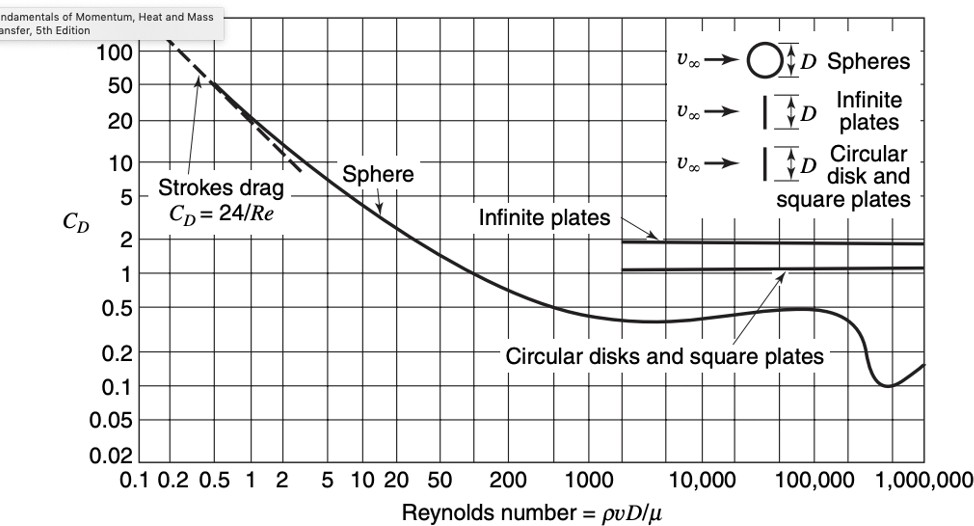


Figure 1.1: *𝐶𝑑* vs Re

### Motivation

The drag coefficient *𝐶𝑑* and Reynolds number *𝑅𝑒* are essential in fluid dynamics.

### Objective of The Research

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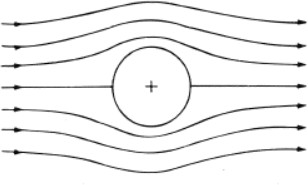


Figure 1.2: Flow around a circular cylinder

### Methodology

Insert Text Here

|  |  |
| --- | --- |
| Re | *𝐶𝑑* |
| *𝑅𝑒*1 | *𝐶𝑑*1 |
| *𝑅𝑒*2 | *𝐶𝑑*2 |

Table 1.1: Drag coefficients at different Reynolds numbers

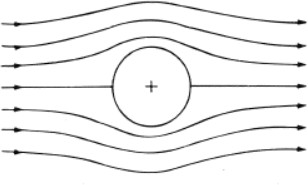
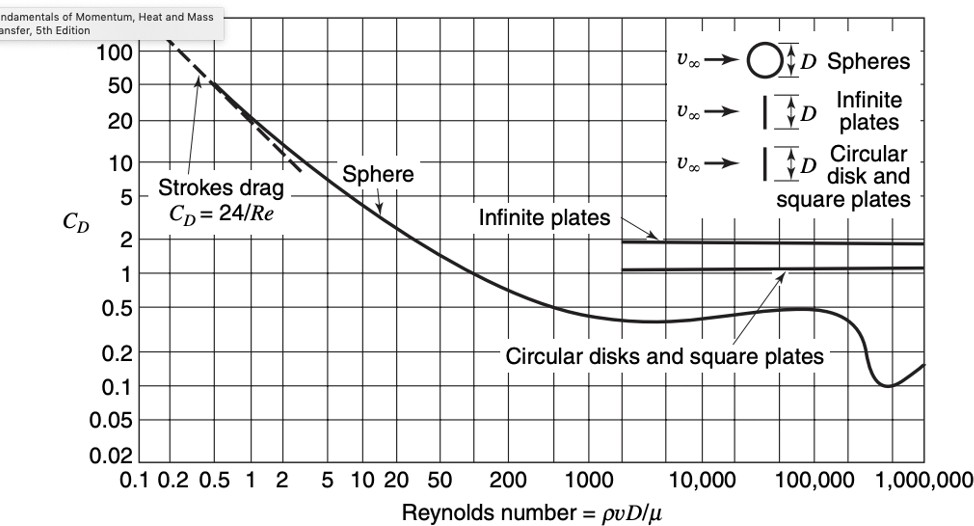
### Organization of the Thesis

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## Chapter 2 OVERVIEW

### Section 1

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(a) (b)

Figure 2.1: (a) *𝐶𝑑* vs Re and (b) Streamline Plot

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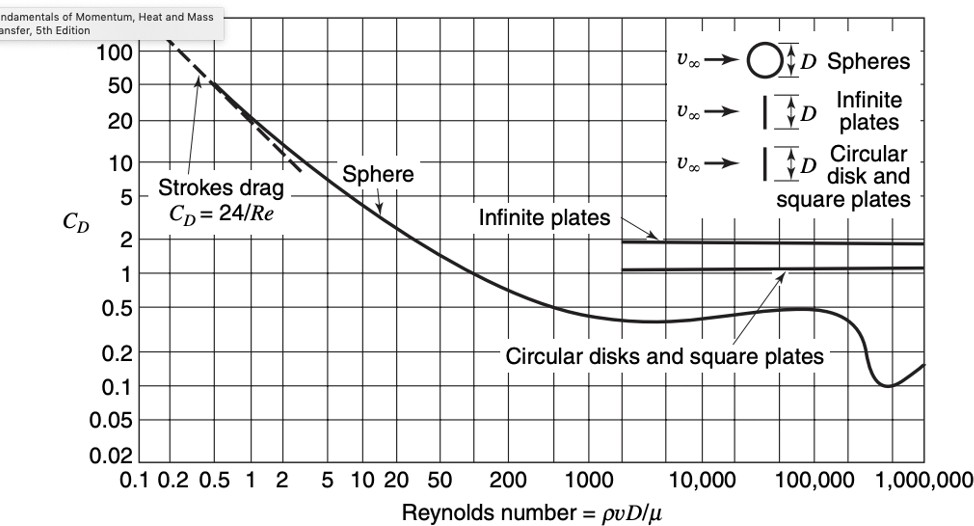
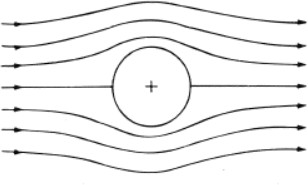
 

Figure 2.2: *𝐶𝑑* vs Re Figure 2.3: Streamline Plot

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**Chapter 6**

# RESULTS AND DISCUSSIONS

**Chapter 7**

**CONCLUSIONS AND FUTURE SCOPES**

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*Journal of Nonlinear, Complex and Data Science*, (0), 2024.

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**APPENDIX**