

Optimal Control
with Aerospace Applications - Longuski
Notes

Joseph Le

Contents

1	Parameter Optimization	5
1.1	Introduction	5
1.2	Parameter Optimization with Constraints	5
1.3	Exercises	5
2	Optimal Control Theory	7
2.1	Optimal Launch of a Satellite	7
2.2	General Form of the Problem	7
2.3	The Problems of Bolza, Lagrange, and Mayer	7
2.4	A Provocative Example Regarding Admissible Functions	7
2.5	Summary	7
2.6	Exercises	7

Chapter 1

Parameter Optimization

1.1 Introduction

1.2 Parameter Optimization with Constraints

1.3 Exercises

Chapter 2

Optimal Control Theory

2.1 Optimal Launch of a Satellite

2.2 General Form of the Problem

2.3 The Problems of Bolza, Lagrange, and Mayer

2.4 A Provocative Example Regarding Admissible Functions

2.5 Summary

2.6 Exercises