

## **Chapter 11. Optimal Control Theory Electronic Supplement**

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This archive contains the Mathematica® file (termed a notebook) that solves the example problem in the exercise at the end of the chapter as well as the instructions on how to use it.

The notebook file is self-documented to guide you through using optimal control theory techniques discussed in the chapter to solve the exercise. The notebook was built in Mathematica v. 8.0.4.0. If you are at an academic institution, you are already likely to have free access to it. However, if not, Wolfram ([www.Wolfram.com](http://www.Wolfram.com)), which publishes Mathematica, also has free software to read notebook files, although you cannot change any of the operations. Their current reader is called CDF-Player and can be found at <http://www.wolfram.com/cdf-player/>.

#### **Contents**

READMe.pdf

    This file.

Example Ricatti.nb

    This contains the self-documented file on how to use the Ricatti equation to solve the example problem in the exercise section. You can adapt this file to solve many other problems using optimal control theory as well by changing the system and control matrices.