



Høgskolen i Telemark

Telemark University College

Department of Electrical Engineering, Information Technology and Cybernetics

Tutorial

Introduction to MATLAB

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```
MATLAB 7.4.0 (R2007a)
File Edit Debug Desktop Window Help
Current Directory: C:\temp\MATLAB
Workspace
Command Window
This is a Classroom License for instructional use only.
Research and commercial use is prohibited.
>> A=[1 2;0 3]
A =
     1     2
     0     3
>>
Command History
end
plot(1:5, y, 'b')
xlabel('Time 0 1sec 2 3sec 4')
title('Response in the output y(t) after unit step')
-- 29.09.09 10:06 -->
-- 29.09.09 11:04 -->
-- 30.09.09 08:22 -->
-- 04.10.09 10:34 -->
A=[1 2;0 3]
-- 10.10.09 10:09 -->
coolbox
help control_system
help linear_algebra
-- 11.10.09 00:17 -->
A=[1 2;0 3]
```



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Preface

MATLAB is a tool for technical computing, computation and visualization in an integrated environment. This document explains the basic concepts in MATLAB.

MATLAB is an abbreviation for MATrix LABoratory, so it is well suited for matrix manipulation and problem solving related to Linear Algebra.

MATLAB offers lots of additional Toolboxes for different areas such as Control Design, Image Processing, Digital Signal Processing, etc.

For more information about MATLAB, see my Blog: <http://home.hit.no/~hansha>

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1 Introduction

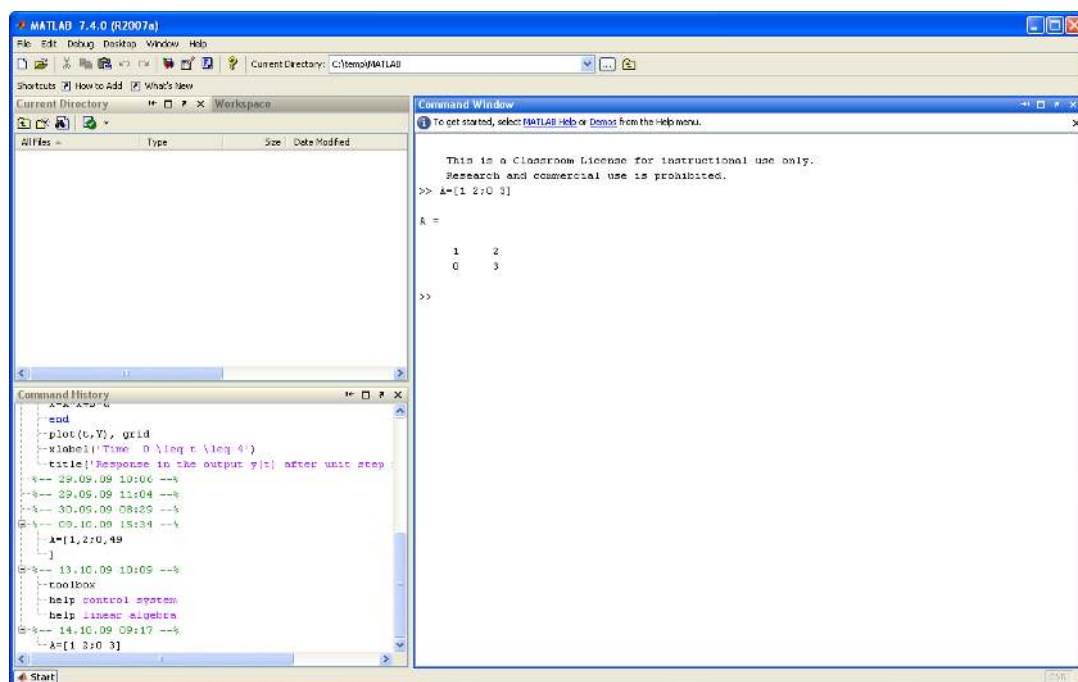
MATLAB is a tool for technical computing, computation and visualization in an integrated environment, e.g.,

- Math and computation
- Algorithm development
- Data acquisition
- Modeling, simulation, and prototyping
- Data analysis, exploration, and visualization
- Scientific and engineering graphics
- Application development, including graphical user interface building

MATLAB is developed by The MathWorks. MATLAB is a short-term for MATrix LABoratory. MATLAB is in use world-wide by researchers and universities.

For more information, see www.mathworks.com

Below we see the MATLAB Environment:



MATLAB has the following windows:

- Command Window
- Command History

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