

ST. ALOYSIUS (AUTO) COLLEGE, JABALPUR  
DEPARTMENT OF MATHEMATICS  
CERTIFICATE COURSE  
BASICS OF MATLAB

Paper	Title	Maximum Marks	Minimum Marks
I	Basics of MATLAB-Theory	50	20
II	Basics of MATLAB-Practical	50	20

Note: Total duration of the course is 30 contact hours.

M. Dhive

Khandu  
26/7/24

R. Minam

Jalau

S. Jain

P. K. S.

M.

M.

ST. ALOYSIUS COLLEGE (AUTO), JABALPUR  
DEPARTMENT OF MATHEMATICS  
CERTIFICATE COURSE  
BASICS OF MATLAB-THEORY

Maximum Marks: 50

Time: 2 hours

Minimum Marks: 20

Credit: 1

**COURSE OUTCOME:**

Upon successful completion of this course, the student will have the:

- CO1 Knowledge of a input output command of MATLAB
- CO2 An understanding arithmetic operations, matrix manipulation, logical operations.
- CO3 An understanding graphics, plotting.

**MODULE I-** Input output of data from Matlab command. File types. Creating, saving and executing the script file. Creating and executing functions file.

**MODULEII-** Working with files and directories. Matrix manipulation. Creating vectors. Arithmetic operations. Relational operations. Logical operations. Matrix functions. Determinant of Matrix.

**MODULE III -**Graphics: Two and three dimensional plot.

M. Dhruv

Wandana  
26/7/24

Rimani

Me

Arjun

AL

Sai

Punit

REFERENCE BOOKS:-

1. RudraPratap, Getting Started with MATAB: A Quick Introduction for Scientists and Engineers. Oxford University Press.
2. Stormy Attaway, MATLAB: A Practical Approach, Butterworth-Heinemann Publications, USA.

ST. ALOYSIUS COLLEGE (AUTO), JABALPUR  
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CERTIFICATE COURSE  
BASICS OF MATLAB-PRACTICAL

Maximum Marks: 50

Time: 2 hours

Minimum Marks: 20

List of Practicals:

WAP in MATLAB for multiplication of matrices.

WAP in MATLAB for the inverse of a matrix.

WAP in MATLAB for Determinant of Matrix.

*Prabhu*

*Mandru*  
26/7/24

*Prinani*

*AL*

*Siam*

4. WAP in MATLAB for the average of finite numbers.
5. WAP in MATLAB using "if else if" statement.
6. WAP in MATLAB for plotting graphs of trigonometric functions.

M. Dhruv

Mandru  
26/7/24.

Rohani

Ashang

Pooja

Sain

K

MD