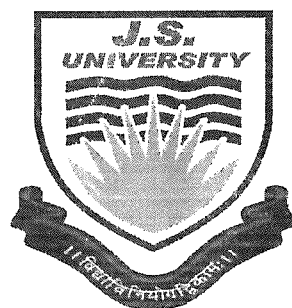# J.S. University, Shikohabad

Established by UP Govt. Act No. 07 of 2015

Recognized by U.G.C. under section 2 (f) of Act-1956

Value Added Course

[VAC-012]

Training Program on MATLAB R2017

Faculty of Engineering

Department of Electrical and Electronics Engineering

	J.S. University, Shikohabad Faculty of Engineering	Value Added Course
		AY: 2018-19

Training Program on MATLAB R2017

[VAC-012]

Learning Objective:

This Course will provide knowledge of design and coding fundamentals for modeling a circuit to the students.

Duration: 30 Hours. (Theory and Practical)

Course Outcomes: -

Maximum Exposure has to be given on Practical Oriented

After completion of the course the student shall be able to:-

1. Introduction TO MATLAB : Installation on Windows, Student license procedure, Introduction to different modules
2. To Understand the circuit analysis and plotting Using MATLAB
3. To understand the basic fundamentals and Handle the matrices using MATLAB
4. Problem Diagnose and Differentiation and integration in MATLAB
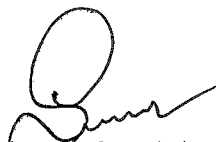5. Modeling and simulation Array operations and Linear equations

	J.S. University, Shikohabad	Value Added Course
	Faculty of Engineering	AY: 2018-19

Syllabus Outline

1. **Module-1: Introduction to MATLAB**

   - The MATLAB Environment

   - MATLAB Basics – Variables, Numbers, Operators, Expressions, Input and output.

   - Vectors, Arrays – Matrices

2. **Module-2: MATLAB Functions**

   - Built-in Functions

   - User defined Functions

3. **Module-3: Graphics with MATLAB**

   - Files and File Management – Import/Export

   - Basic 2D, 3D plots

   - Graphic handling

4. **Module-4: Programming with MATLAB**

   - Conditional Statements, Loops

   - MATLAB Programs – Programming and Debugging.

   - Applications of MATLAB Programming.

5. **Module-5: Mathematical Computing with MATLAB**

   - Algebraic equations

   - Basic Symbolic Calculus and Differential equations

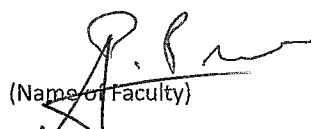   - Numerical Techniques and Transforms

References

1. http://www.mathworks.com/help/releases/R2014b/pdf_doc/matlab/getstart.pdf

(Name of Faculty)　　　　(Name of Faculty)　　　　(Name of Faculty)

PHHHRH GHHHPHHIHHHH　　BHHH AHHHHIHIHH　　RIHHHHHH/PHHHHIHH/RHHH Hf
Faculty/Department

Dr. Shaik Sudula　　Dr. P.P. Singh　　Dr. Adnan Qasim