

Discipline Electrical	Semester: 4 <sup>th</sup> Group-1, Sec-A	Name of the Teaching Faculty: - Ananya Subhadarsinee&Sigma Ray
Subject: - Matlab	No of Days/per Week Class Allotted: 3p/week	Semester From: 10 <sup>th</sup> March 2022 to 10 <sup>th</sup> June 2022
Week	Class Day	Practical Topics
1 <sup>st</sup>	15/03/2022	1. Introduction to MATLAB programming: 1.1. Functions and operation using variables and arrays
2 <sup>nd</sup>	22/03/2022	1.1.1. To learn algebraic, trigonometric and exponential manipulation 1.1.2. To learn Arithmetic, Relational and Logic operator. 1.2. Matrix formation and its manipulation.
3 <sup>rd</sup>	29/03/2022	1.3. Vector manipulation: 1.3.1. Use of linspace to create vectors. 1.3.2. To create, add and multiply vectors. 1.3.3. Use of sin and sqrt functions with vector arguments.1
4 <sup>th</sup>	5/04/2022	4 TH SEMESTER ELECTRICAL 21 1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots 1.4.2. Label the plot and printing.
5 <sup>th</sup>	12/04/2022	4 TH SEMESTER ELECTRICAL 21 1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots 1.4.2. Label the plot and printing.
6 <sup>th</sup>	19/04/2022	Holiday
7 <sup>th</sup>	26/04/2022	1.5. Write and execute a file to plot a circle, impulse, step, ramp, sine and cosine functions.
	03/05/2022	2. Introduction to SIMULINK: 2.1. Use of Commonly used blocks, Math operation block and Display block from SIMULINK library.
8 <sup>th</sup>	10/05/2022	Holiday
9 <sup>th</sup>	17/05/2022	2. Introduction to SIMULINK: 2.1. Use of Commonly used blocks, Math operation block and Display block from SIMULINK library. 2.2. Use of logical and relational operator block.

10 <sup>th</sup>	24/05/2022	2.3. Use of Sim-Power system block to use Electrical sources, elements and Power electronics devices.
11 <sup>th</sup>	31/05/2022	2.3. Use of Sim-Power system block to use Electrical sources, elements and Power electronics devices.
12 <sup>th</sup>	07/06/2022	2.4. SIMULATION: 2.4.1. Verification of Network theorems.
13 <sup>th</sup>	Extra Class	2.4. SIMULATION: 2.4.1. Verification of Network theorems.
14 <sup>th</sup>	Extra Class	2.4.2. Simulation of a half wave uncontrolled rectifier
15 <sup>th</sup>	Extra Class	2.4.3. Simulation of 1-phase full bridge controlled rectifier.
16 <sup>th</sup>	Extra Class	2.4.4. Simulation of step-down chopper.
17 <sup>th</sup>	Extra Class	2.4.4. Simulation of step-down chopper.

Signature of Faculty

Discipline Electrical	Semester: 4 <sup>th</sup> Group-2, Sec-A	Name of the Teaching Faculty: - Ananya Subhadarsinee&Sigma Ray
Subject: - Matlab	No of Days/per Week Class Allotted: 3p/week	Semester From: 10 <sup>th</sup> March 2022 to 10 <sup>th</sup> June 2022
Week	Class Day	Practical Topics
1 <sup>st</sup>	11/03/2022	1. Introduction to MATLAB programming: 1.1. Functions and operation using variables and arrays 1.1.1. To learn algebraic, trigonometric and exponential manipulation 1.1.2. To learn Arithmetic, Relational and Logic operator. 1.2. Matrix formation and its manipulation.
2 <sup>nd</sup>	18/03/2022	Holiday
3 <sup>rd</sup>	25/03/2022	1.3. Vector manipulation: 1.3.1. Use of linspace to create vectors. 1.3.2. To create, add and multiply vectors. 1.3.3. Use of sin and sqrt functions with vector arguments.3
4 <sup>th</sup>	1/04/2022	Holiday
5 <sup>th</sup>	8/04/2022	4 TH SEMESTER ELECTRICAL 21 1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots 1.4.2. Label the plot and printing.
6 <sup>th</sup>	15/04/2022	Holiday
7 <sup>th</sup>	22/04/2022	1.5. Write and execute a file to plot a circle, impulse, step, ramp, sine and cosine functions.
8 <sup>th</sup>	29/04/2022	2. Introduction to SIMULINK: 2.1. Use of Commonly used blocks, Math operation block and Display block from SIMULINK library.
9 <sup>th</sup>	6/05/2022	2. Introduction to SIMULINK: 2.1. Use of Commonly used blocks, Math operation block and Display block from SIMULINK library. 2.2. Use of logical and relational operator block.
10 <sup>th</sup>	13/05/2022	2.3. Use of Sim-Power system block to use Electrical sources, elements and Power electronics devices.
11 <sup>th</sup>	20/05/2022	2.3. Use of Sim-Power system block to use Electrical sources, elements and Power electronics devices.

12 <sup>th</sup>	27/05/2022	2.4. SIMULATION: 2.4.1. Verification of Network theorems.
13 <sup>th</sup>	03/06/2022	2.4. SIMULATION: 2.4.1. Verification of Network theorems.
14 <sup>th</sup>	10/06/2022	2.4.2. Simulation of a half wave uncontrolled rectifier
15 <sup>th</sup>	Extra Class	2.4.3. Simulation of 1-phase full bridge controlled rectifier.
16 <sup>th</sup>	Extra Class	2.4.4. Simulation of step-down chopper.
17 <sup>th</sup>	Extra Class	2.4.4. Simulation of step-down chopper.
18 <sup>th</sup>	Extra Class	2.4.4. Simulation of step-down chopper.

Signature of Faculty