## ACADEMIC LESSON PLAN OF SUMMER 2023

Discipline:	Semester:4 <sup>TH</sup>	Name of the Teaching Faculty: ANANYA SHUBHADARSINEE
FLECTRICAL	(SEC-A)	
ENGG	GROUP-1	
LINCO.	01001-1	
Subject:	No. of days/per	Semester From: 14 <sup>th</sup> Feb 2023 to 23 <sup>rd</sup> May 2023
· ·	week class	
SIMULATION	allotted:	No. of Weeks: 15 weeks
ON MATLAB	1n(3hr)/week	
1 <sup>st</sup>	1 <sup>st</sup>	1. Introduction to MATLAB programming:
		1.1. Functions and operation using variables and arrays.
2 <sup>nd</sup>	1 <sup>st</sup>	1.1.1. To learn algebraic, trigonometric and exponential manipulation.
2rd	1 <sup>st</sup>	1.1.2. To learn Arithmetic, Relational and Logic operator.
3	-	
$4^{\text{th}}$	$1^{st}$	1.3. Vector manipulation: 1.3.1. Use of linspace to create vectors.
th	- st	
5"	1"	1.3.2. To create, add and multiply vectors.
6 <sup>th</sup>	1 st	1.2.2. Use of sin and sart functions with vector arguments
0	1	1.5.5. Ose of sin and squ functions with vector arguments.
7 <sup>th</sup>	1st	1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots
8 <sup>th</sup>	$1^{st}$	1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots
		1.4.2. Label the plot and printing.
9 <sup>th</sup>	1 <sup>st</sup>	1.5. Write and execute a file to plot a circle, impulse, step, ramp, sine and
		cosine functions.
th	1 <sup>st</sup>	2.Introduction to SIMULINK:
10 <sup>m</sup>		2.1. Use of Commonly used blocks, Math operation block and Display block
		from SIMULINK library.
th	$1^{st}$	2.2. Use of logical and relational operator block.
11 <sup>m</sup>		2.3. Use of Sim-Power system block to use Electrical sources, elements and
		Power electronics devices.
12 <sup>th</sup>	1 <sup>st</sup>	2.4. SIMULATION:
		2.4.1. Verification of Network theorems.
13 <sup>th</sup>	$1^{st}$	2.4.2. Simulation of a half wave uncontrolled rectifier.
$14^{\text{th}}$	$1^{st}$	2.4.3. Simulation of 1-phase full bridge controlled rectifier.
1 cth	1 St	
15"	15	2.4.4. Simulation of step-down chopper.
(EXTRA		
CLASSES)		

Signature of Teaching Faculty

## ACADEMIC LESSON PLAN OF SUMMER 2023

Discipline:	Semester:4 <sup>TH</sup>	Name of the Teaching Faculty: ANANYA SHUBHADARSINEE
ELECTRICAL	(SEC-A)	
ENGG	GROUP-?	
LINGO.	01001-2	
Subject:	No. of days/per	Semester From: 14 <sup>th</sup> Feb 2023 to 23 <sup>rd</sup> May 2023
U U	week class	
SIMULATION	allotted:	No. of Weeks: 15 weeks
ON MATLAB	ln(3hr)/week	
	ip(5m)/week	
1 <sup>st</sup>	1 <sup>st</sup>	1. Introduction to MATLAB programming:
		1.1. Functions and operation using variables and arrays.
2 <sup>nd</sup>	1 <sup>st</sup>	1.1.1. To learn algebraic, trigonometric and exponential manipulation.
2rd	1 <sup>st</sup>	1.1.2. To learn Arithmetic, Relational and Logic operator.
3	-	
$4^{\text{th}}$	$1^{st}$	1.3. Vector manipulation: 1.3.1. Use of linspace to create vectors.
<b>~</b> th	_ st	
5	15	1.3.2. To create, add and multiply vectors.
6 <sup>th</sup>	1 st	1.3.3 Use of sin and sart functions with vector arguments
0	1	1.5.5. Ose of shi and sqrt functions with vector arguments.
7 <sup>th</sup>	1st	1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots
$8^{th}$	$1^{st}$	1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots
		1.4.2. Label the plot and printing.
9 <sup>th</sup>	1 <sup>st</sup>	1.5. Write and execute a file to plot a circle, impulse, step, ramp, sine and
		cosine functions.
r oth	1 <sup>st</sup>	2.Introduction to SIMULINK:
10 <sup>m</sup>		2.1. Use of Commonly used blocks, Math operation block and Display block
		from SIMULINK library.
a a th	1 <sup>st</sup>	2.2. Use of logical and relational operator block.
11 <sup>m</sup>		2.3. Use of Sim-Power system block to use Electrical sources, elements and
		Power electronics devices.
$12^{\text{th}}$	1 <sup>st</sup>	2.4. SIMULATION:
		2.4.1. Verification of Network theorems.
13 <sup>th</sup>	1 <sup>st</sup>	2.4.2. Simulation of a half wave uncontrolled rectifier.
$14^{\text{th}}$	$1^{st}$	2.4.3. Simulation of 1-phase full bridge controlled rectifier.
1 cth	<b>1</b> st	
15"	1.	2.4.4. Simulation of step-down chopper.
(EXTRA		
CLASSES)		

Signature of Teaching Faculty

## ACADEMIC LESSON PLAN OF SUMMER 2023

Discipline:	Semester:4 <sup>TH</sup>	Name of the Teaching Faculty: ANANYA SHUBHADARSINEE
ELECTRICAL	(SEC-B)	
ENGG.		
Subject:	No. of days/per	Semester From: 14 <sup>th</sup> Feb 2023 to 23 <sup>rd</sup> May 2023
	week class	
SIMULATION	allotted:	No. of Weeks: 15 weeks
ON MATLAB	1p(3hr)/week	
1 <sup>st</sup>	$1^{st}$	1. Introduction to MATLAB programming:
		1.1. Functions and operation using variables and arrays.
$2^{nd}$	$1^{st}$	1.1.1. To learn algebraic, trigonometric and exponential manipulation.
3 <sup>rd</sup>	1 <sup>st</sup>	1.1.2. To learn Arithmetic, Relational and Logic operator.
5	-1	
4 <sup>th</sup>	$1^{st}$	1.3. Vector manipulation: 1.3.1. Use of linspace to create vectors.
<b>c</b> th	1 St	122 To suggets, add and multiply suggets as
3	1	1.5.2. To create, add and multiply vectors.
6 <sup>th</sup>	1 <sup>st</sup>	1.3.3. Use of sin and sort functions with vector arguments.
Ŭ	-	
7 <sup>th</sup>	1st	1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots
	1 St	
8 <sup>th</sup>	150	1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots
	-1	1.4.2. Label the plot and printing.
9 <sup>th</sup>	$1^{st}$	1.5. Write and execute a file to plot a circle, impulse, step, ramp, sine and
		cosine functions.
1 Oth	$1^{st}$	2.Introduction to SIMULINK:
10		2.1. Use of Commonly used blocks, Math operation block and Display block
		from SIMULINK library.
1 1 th	$1^{st}$	2.2. Use of logical and relational operator block.
11		2.3. Use of Sim-Power system block to use Electrical sources, elements and
		Power electronics devices.
$12^{\text{th}}$	$1^{st}$	2.4. SIMULATION:
		2.4.1. Verification of Network theorems.
13 <sup>th</sup>	1 <sup>st</sup>	2.4.2. Simulation of a half wave uncontrolled rectifier.
th	. et	
14 <sup>m</sup>	1 <sup>st</sup>	2.4.3. Simulation of 1-phase full bridge controlled rectifier.
15 <sup>th</sup>	1 st	2.4.4. Simulation of stan down channer
	1	2.4.4. Simulation of step-down chopper.
(EATKA		
CLASSES)		

Signature of Teaching Faculty