



ESTD : 2007



Sri Indu Institute of Engineering and Technology (Autonomous)

(Formerly RVR Institute of Engineering & Technology)

An Autonomous Institution Under UGC

NAAC Accredited. Recognized Under 2(f) of UGC Act 1956

EAMCET CODE: INDI

Approved by AICTE, New Delhi, & Affiliated to JNTUH, Hyderabad.

JNTUH CODE: X3

COURSE FILE

ON

BASIC ELECTRICAL ENGINEERING LAB

Course Code – EE202ES

**I B. Tech Semester-II
A.Y. 2022-2023**

Prepared by
K.RAJASHEKHAR
Asst. Professor

Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda(VIII) Ibrahimpatnam (M) R.R. Dist-501 510

PRINCIPAL
Sri Indu Institute of Engineering & Tech.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



ESTD : 2007



Sri Indu Institute of Engineering and Technology (Autonomous)

(Formerly RVR Institute of Engineering & Technology)

An Autonomous Institution Under UGC

NAAC Accredited. Recognized Under 2(f) of UGC Act 1956

EAMCET CODE: INDI

Approved by AICTE, New Delhi, & Affiliated to JNTUH, Hyderabad.

JNTUH CODE: X3

Academic Year	2022-2023
Course Title	Basic Electrical Engineering Lab
Course Code	EE202ES
Programme	B.Tech
Year & Semester	I & II
Branch & Section	CSE(AI&ML)-A
Regulation	BR22
Room No	D204 & A005
Name of the Lab Incharge	S.NISCHALA
Name of the Faculty Incharge	K.RAJASHEKHAR

Index of Lab File

S. No.	Name of the content
1	Institute vision and mission
2	Programme outcomes
3	Course Syllabus with Structure
4	Course Outcomes (CO) and CO-PO mapping
5	List of experiments and their CO, PO mapping
6	Time table
7	Model Practical End examination questions
8	Schedule of end practical examinations
9	List of examiners
10	Lab occupancy chart
11	Dos and Don'ts
12	Physical lab floor plan with area in Sq.m
13	Lab manual
14	CO-PO Attainments



ESTD : 2007



Sri Indu Institute of Engineering and Technology (Autonomous)

(Formerly RVR Institute of Engineering & Technology)

An Autonomous Institution Under UGC

NAAC Accredited. Recognized Under 2(f) of UGC Act 1956

EAMCET CODE: INDI

Approved by AICTE, New Delhi, & Affiliated to JNTUH, Hyderabad.

JNTUH CODE: X3

INSTITUTE VISION & MISSION

Vision:

To become a premier institute of academic excellence by providing the world class education that transforms individuals into high intellectuals, by evolving them as empathetic and responsible citizens through continuous improvement.

Mission:

- **IM1:** To offer outcome-based education and enhancement of technical and practical skills.
- **IM2:** To Continuous assess of teaching-learning process through institute-industry collaboration.
- **IM3:** To be a centre of excellence for innovative and emerging fields in technology development with state-of-art facilities to faculty and students' fraternity.
- **IM4:** To Create an enterprising environment to ensure culture, ethics and social responsibility among the stakeholders.


Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda(VIII) Ibrahimpatnam (M) R.R. Dist-501 510


PRINCIPAL
Sri Indu Institute of Engineering & Tech.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

PROGRAMME OUTCOMES

PO1: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design / Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6: The Engineer & Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment & Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual & Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, give and receive clear instructions.

PO11: Project Management & Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-Long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda (V) Ibrahimpatnam (M) R.R. Dist-501 510



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

B.Tech. in COMPUTER SCIENCE AND ENGINEERING (AI & ML) COURSE STRUCTURE, I YEAR SYLLABUS (BR22 Regulations)

Applicable from Academic Year: 2022-23 Batch

I Year I Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA101BS	Matrices and Calculus	3	1	0	4
2.	AP102BS	Applied Physics	3	1	0	4
3.	CS103ES	Programming for Problem Solving	3	0	0	3
4.	ME102ES	Engineering Workshop	0	1	3	2.5
5.	EN104HS	English for Skill Enhancement	2	0	0	2
6.	CS106ES	Elements of Computer Science & Engineering	0	0	2	1
7.	AP105BS	Applied Physics Laboratory	0	0	3	1.5
8.	CS107ES	Programming for Problem Solving Laboratory	0	0	2	1
9.	EN107HS	English Language and Communication Skills Laboratory	0	0	2	1
10.	*MC101ES	Environmental Science	3	0	0	0
11.		Induction Programme				
Total			14	3	12	20

I Year II Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	CH203BS	Engineering Chemistry	3	1	0	4
3.	ME201ES	Computer Aided Engineering Graphics	1	0	4	3
4.	EE201ES	Basic Electrical Engineering	2	0	0	2
5.	EC201ES	Electronic Devices and Circuits	2	0	0	2
6.	CH206BS	Engineering Chemistry Laboratory	0	0	2	1
7.	EE202ES	Basic Electrical Engineering Laboratory	0	0	2	1
8.	CS201ES	Python Programming Laboratory	0	1	2	2
9.	CS203ES	IT Workshop	0	0	2	1
Total			11	3	12	20



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

BASIC ELECTRICAL ENGINEERING LABORATORY (Course Code: EE202ES)

B.Tech. I Year II Sem.

L T P C
0 0 2 1

Prerequisites: Basic Electrical Engineering

Course Objectives:

- To measure the electrical parameters for different types of DC and AC circuits using conventional and theorems approach.
- To study the transient response of various R, L and C circuits using different excitations.
- To determine the performance of different types of DC, AC machines and Transformers.

Course Outcomes: After learning the contents of this paper the student must be able to

- Verify the basic Electrical circuits through different experiments.
- Evaluate the performance calculations of Electrical Machines and Transformers through various testing methods.
- Analyze the transient responses of R, L and C circuits for different input conditions.

List of experiments/demonstrations:

PART- A (compulsory)

1. Verification of KVL and KCL
2. Verification of Thevenin's and Norton's theorem
3. Transient Response of Series RL and RC circuits for DC excitation
4. Resonance in series RLC circuit
5. Calculations and Verification of Impedance and Current of RL, RC and RLC series circuits
6. Measurement of Voltage, Current and Real Power in primary and Secondary Circuits of a Single-Phase Transformer
7. Performance Characteristics of a DC Shunt Motor
8. Torque-Speed Characteristics of a Three-phase Induction Motor.

PART-B (any two experiments from the given list)

1. Verification of Superposition theorem.
2. Three Phase Transformer: Verification of Relationship between Voltages and Currents(Star-Delta, Delta-Delta, Delta-star, Star-Star)
3. Load Test on Single Phase Transformer (Calculate Efficiency and Regulation)
4. Measurement of Active and Reactive Power in a balanced Three-phase circuit
5. No-Load Characteristics of a Three-phase Alternator

TEXT BOOKS:

1. D.P. Kothari and I. J. Nagrath, "Basic Electrical Engineering", Tata McGraw Hill, 4th Edition, 2019.
2. MS Naidu and S Kamakshaiyah, "Basic Electrical Engineering", Tata McGraw Hill, 2nd Edition, 2008.



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

COURSE OUTCOMES

Course Name: Basic Electrical Engineering Lab (C127)

At the End of the course, student will be able to

CO No	DESCRIPTION
C127.1	Apply basic circuit laws and simplify the network using reduction techniques. (Application)
C127.2	Understand time domain analysis, resonance in RLC parameters and evaluate impedance in RLC circuit (Knowledge)
C127.3	Understand the working concept , Select range of apparatus based on the ratings of different machines like transformers and motors (Knowledge)
C127.4	Determine efficiency and regulation of transformers by various test (Evaluation)
C127.5	Determine the performance characteristics of dc shunt motor. (Evaluation)
C127.6	Determine 3 phase power, torque speed characteristics of 3 phase induction motor. (Evaluation)

COs and POs & PSOs Mapping

Course Outcome	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
C127.1	3	3	2	1	-	-	-	-	2	1	-	2	-	-
C127.2	3	3	1	2	1	-	-	-	2	1	-	2	-	-
C127.3	3	-	-	-	1	-	-	-	2	-	-	3	-	-
C127.4	2	3	1	-	1	1	-	-	3	-	-	2	-	-
C127.5	2	3	1	-	1	1	-	-	3	-	-	2	-	-
C127.6	2	3	1	-	1	1	-	-	3	-	-	2	-	-
PO Avg	2.5	3	1.2	1.5	1	1	-	-	2.5	1	-	2.17	-	-

3-High

2-Medium

1-Low



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

LIST OF EXPERIMENTS AND THEIR CO, PO MAPPING

S.No	Name of The Experiment	CO	PO
1	Verification of KVL and KCL	1	1,2,3,4,9,10,12
2	Verification of Thevenin's and Norton's theorem	1	1,2,3,4,9,10,12
3	Transient Response of Series RL and RC circuits for DC excitation	2	1,2,3,4,5,9,10,12
4	Resonance in series RLC circuit	2	1,2,3,4,5,9,10,12
5	Calculations and Verification of Impedance and Current of RL, RC and RLC series circuits	2	1,2,3,4,5,9,10,12
6	Measurement of Voltage, Current and Real Power in primary and Secondary Circuits of a Single-Phase Transformer	3	1,5,9,12
7	Performance Characteristics of a DC Shunt Motor	5	1,2,3,5,6,9,12
8	Torque-Speed Characteristics of a Three-phase Induction Motor.	6	1,2,3,5,6,9,12
9	Verification of Superposition theorem	1	1,2,3,4,9,10,12
10	Load Test on Single Phase Transformer (Calculate Efficiency and Regulation)	4	1,2,3,5,6,9,12



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956.

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsabrahimpatnam, Sheriguda(V), Ibrahimpatnam(M), Ranga Reddy Dist., Telangana – 501 510

<https://siiet.ac.in/>

Class: AI&ML-A Semester: II W.E.F-03-04-2023

LH:-D-105

	I 9:40- 10:30	II 10:30 - 11:20	III 11:20- 12:10	12:10- 12.45	IV 12.45- 1.35	V 1.35- 2.25	VI 2.25- 3.15	VII 3.15-4.00
MON	EC/BEE LAB			L U N C H	EC	EDC	BEE	PYTHON(T)
TUE	EDC	ODE	EC		PYTHON LAB			ODE(T)/EC(T)
WED	CAEG PRACTICE				BEE	ODE	EDC	EDC(T)/ BEE(T)
THU	BEE	ODE	BEE		ITWS LAB			EC(T)/ODE(T)
FRI	EC/BEE LAB				ODE	EC	EDC	LIBRARY
SAT	BEE	ODE	EC		CAEG PRACTICE			BEE(T)/EDC(T)

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
MA201BS	ODE-Ordinary Differential Equations & Vector Calculus	V.SRINIVAS	CH206BS	EC LAB Engineering Chemistry Laboratory	Dr.D.PREMALATHA/ K.MOUNIKA
CH203BS	EC-Engineering Chemistry	Dr.D.PREMALATHA	EE202ES	BEE LAB-Basic Electrical Engineering Laboratory	K.RAJASHEKAR/S. NISCHALA
ME201ES	CAEG-Computer Aided Engineering Graphics	M.YADHAGIRI	CS201ES	PYTHON Programming Laboratory	M.TEJASWI/P.BAL U
EE201ES	BEE-Basic Electrical Engineering	K.RAJASHEKAR	CS203ES	ITWS-IT Workshop	N.KEERTHI CHANDANA/B.SW ATHI
EC201ES	EDC-Electronic Devices & Circuits	P.ARUNA KUMARI			

Class In-Charge

Time Table Coordinator

Head of The Department



Sri Indu Institute of Engg. & Tech
Main Road, Sheriguda(V)
Ibrahimpatnam(M), R.P. Dist.,
Telangana-501 510

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY



UGC Autonomous Institution, Accredited by NAAC with A+ Grade

Recognized under 2(f) of UGC Act 1956.

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Sheriguda(V), Ibrahimpatnam(M), R.R Dist., Telangana – 501 510

X3

BR22

Lab External Question paper

Year & Semester: I-II

Branch: CSE-AI&ML

Subject Name: Basic Electrical Engineering Lab

Faculty Name: K.RAJASHEKHAR

S. No. QUESTIONS

1. Verification of KVL.
2. Verification of KCL.
3. Verification of Thevenins theorem.
4. Verification of Nortons theorem.
5. Transient Response of Series RL circuit using DC excitation.
6. Transient Response of Series RC circuit using DC excitation.
7. Resonance in series RLC circuit.
8. Calculations and Verification of Impedance and Current of RL, RC and RLC series circuits.
9. Verification of Superposition theorem.
10. Torque-Speed Characteristics of a Three-phase Induction Motor.
11. Performance Characteristics of a DC Shunt Motor.
12. Load Test on Single Phase Transformer (Calculate Efficiency and Regulation)



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956.

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpattam, Sheriguda(V), Ibrahimpattam(M), Ranga Reddy Dist., Telangana – 501 510

<https://siiet.ac.in/>

BEE Lab External Time Table Examination Branch

A.Y. : 2022-23

SEM-II

DATE	Day	Branch	Session	HT.No	Total No of Students
21-8-2023	MONDAY	AI&ML-B	FN	22X31A6651 TO 22X31A6697	47
22-8-2023	TUESDAY	AI&ML-A	FN	22X31A6601 TO 22X31A6650	50
23-8-2023	WEDNESDAY	IOT	FN	22X31A6901 TO 22X31A6963	63
24-8-2023	THURSDAY	AI&DS	FN	22X31A7201 TO 22X31A7264	64
25-8-2023	FRIDAY	ECE	FN	22X31A0401 TO 22X31A0464	64


Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda(V) Ibrahimpattam (M) R.R. Dist-501 510


PRINCIPAL
Sri Indu Institute of Engineering & Tech,
Sheriguda(VIII), Ibrahimpattam
R.R. Dist. Telangana-501 510.



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956.

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpattanam, Sheriguda(V), Ibrahimpattanam(M), Ranga Reddy Dist., Telangana – 501 510

<https://siiet.ac.in/>

BEE Lab External Time Table with examiners

A.Y. : 2022-23

SEM-II

DATE	Day	Branch	Session	HT.No	Total No of Students	Internal Examiner	External Examiner
21-8-2023	MONDAY	AI&ML-B	FN	22X31A6651 TO 22X31A6697	47	K.RAJASHEKAR	RAJESH BABU
22-8-2023	TUESDAY	AI&ML-A	FN	22X31A6601 TO 22X31A6650	50	K.RAJASHEKAR	BALU NAIK
23-8-2023	WEDNESDAY	IOT	FN	22X31A6901 TO 22X31A6963	63	S.NISCHALA	RATNA KISHORI
24-8-2023	THURSDAY	AI&DS	FN	22X31A7201 TO 22X31A7264	64	G.BHARGAVI	G.GANESH WAR
25-3-2023	FRIDAY	ECE	FN	22X31A0401 TO 22X31A0464	64	M.P.REENA	LAXMI



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

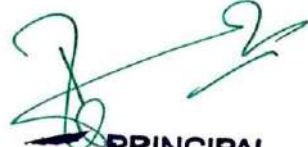
Website: <https://siiet.ac.in/>

LAB OCCUPANCY CHART

BASIC ELECTRICAL ENGINEERING LAB

	I 9:40-10:30	II 10:30 -11:20	III 11:20-12:10	12:10- 12.45	IV 12.45-1.35	V 1.35-2.25	VI 2.25-3.15	VII 3.15- 4.00
MON	I BTECH II SEM AI&ML-A			L U N C H				
TUE	I BTECH II SEM AI&DS				I BTECH II SEM AI&ML-B			
WED	I BTECH II SEM ECE				I BTECH II SEM IOT			
THU					I BTECH II SEM AI&DS			
FRI	I BTECH II SEM AI&ML-A				I BTECH II SEM ECE			
SAT	I BTECH II SEM IOT				I BTECH II SEM AI&ML-B			


Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda(V) Ibrahimpatnam (M) R.R. Dist-501 510


PRINCIPAL
Sri Indu Institute of Engineering & Techno.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

BASIC ELECTRICAL ENGINEERING LAB

Do's

1. Pull the plug itself, not the cord attached to it
2. Disconnect any appliances that spark and have it repaired immediately
3. Always disconnect appliances before cleaning them
4. Turn of appliance when you leave home
5. Clean appliance and free of dust, lint grease,
6. Use moisture resistant cards when outside.
7. Wear rubber solid shoes when operating power tools
8. Follow manufacturer's instructions when operating electrical devices. All electrical devices should carry an underwriter's laboratory approval tag
9. Make sure outdoor electrical out lets are covered with weather proof covers
10. Use extension cards only for temporary applications
11. Use heavy duty cards when using power tools
12. Keep work areas clean and dry. Sparks can ignite wood scraps, saw dust and solvents
13. Make sure your power tools are grounded or certified double insulated.
14. When utilizing adapters, make sure to screw in the wire for grounding.

Don'ts

1. Never turn on an appliance when standing or sitting in water. Shocks can be fatal.
2. Never overload a circuit by plugging into many appliances
3. Plug three way grounded plugs into appropriate outlets. Never tamper with the third prong
4. Never install cords under rugs where they will become warn by foot traffic



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

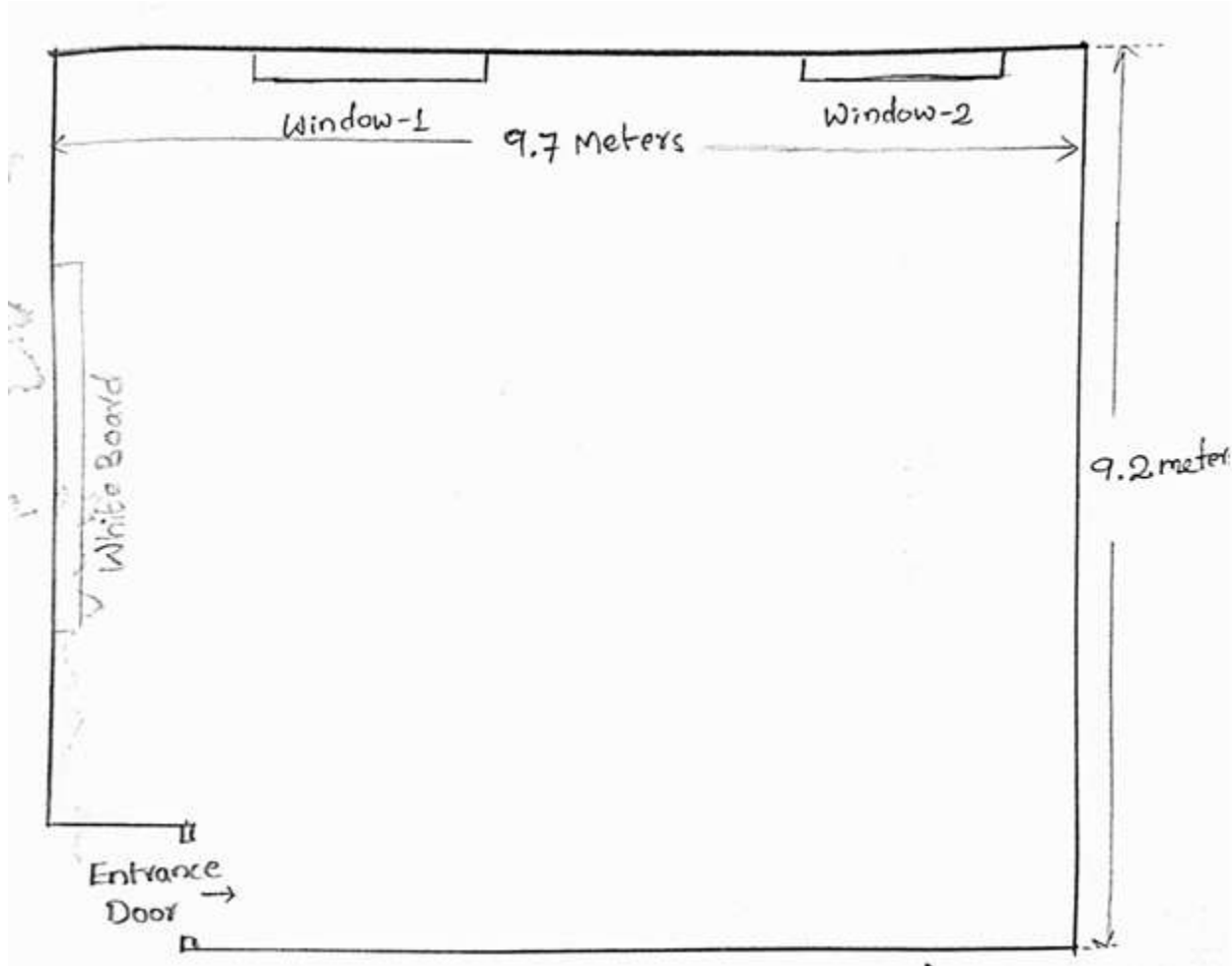
Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

BASIC ELECTRICAL ENGINEERING LAB

PHYSICAL LAB-1 FLOOR PLAN

ROOM NO: D-204



Lab Area (in sq.m) = 89.24

[Signature]
Lab In-Charge

[Signature]
Head of the Department
Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda (V) Ibrahimpatnam (M) R.R. Dist-501 510



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

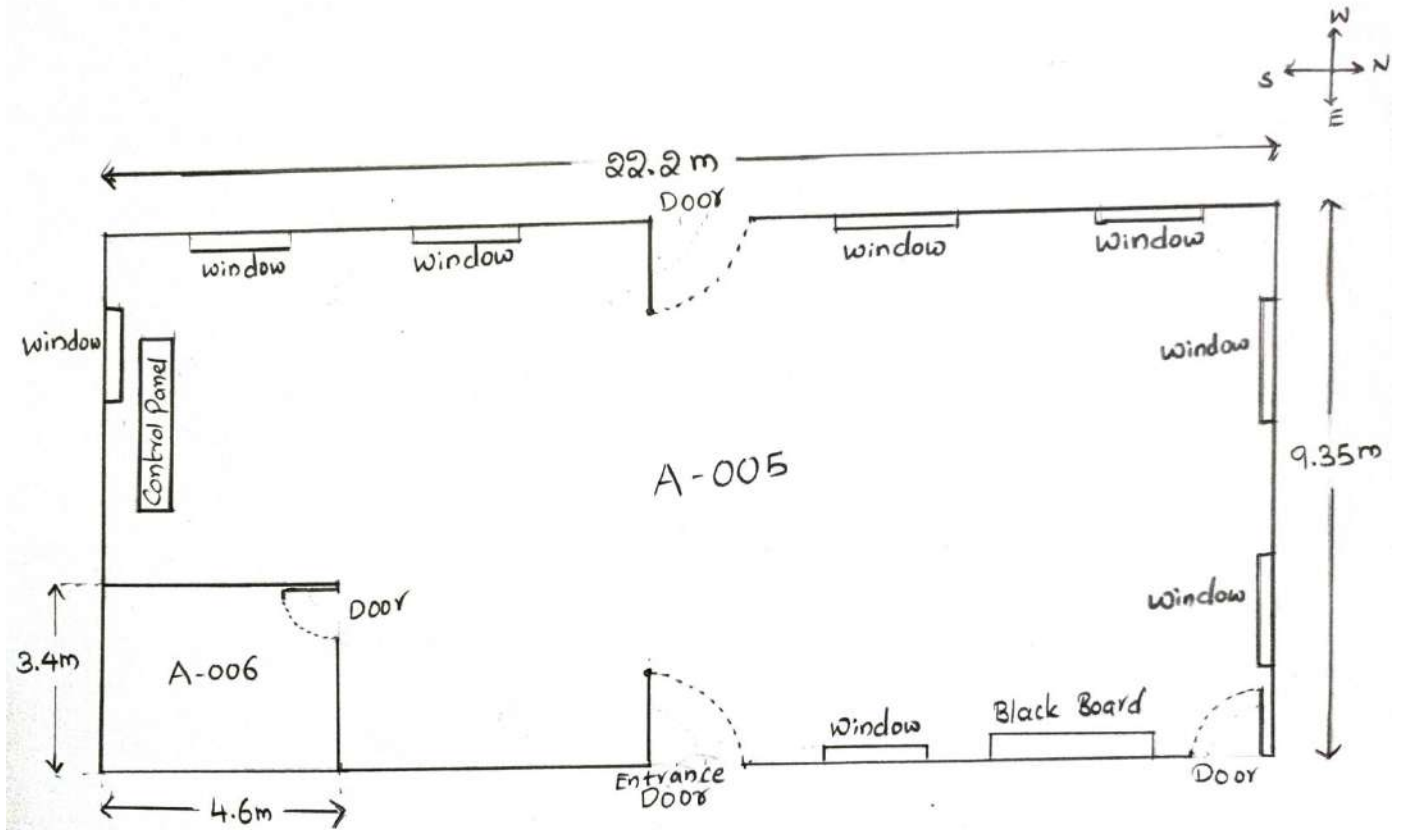
Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

BASIC ELECTRICAL ENGINEERING LAB

PHYSICAL LAB-2 FLOOR PLAN

ROOM NO: A-005



Lab Area (in sq.m) = 191.93

[Signature]
Lab In-Charge

[Signature]
Head of the Department
Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda (V) Ibrahimpatnam (M) R.R. Dist-501 510



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

Lab manual link

<https://drive.google.com/file/d/1CezhXs40s30tKHGvSy8DOi0bg0xJMB-Z/view>

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities and Sciences



Course Outcome Attainment (Internal Examination-1)

Name of the faculty : K.RAJASHEKHAR Academic Year: 2022-2023
 Branch & Section: AI&ML-A Examination: I Internal
 Lab Course Name: Basic Electrical Engineering Lab Year/semester I/II

S.No	HT No.	R+O+A	V+V	E+E+R
Max. Marks ==>		10	10	10
1	22X31A6601	9	9	9
2	22X31A6602	10	10	10
3	22X31A6603	10	8	7
4	22X31A6604	10	9	9
5	22X31A6605	10	4	5
6	22X31A6606	10	4	5
7	22X31A6607	10	9	10
8	22X31A6608	10	10	10
9	22X31A6609	10	9	9
10	22X31A6610	10	4	5
11	22X31A6611	A	A	A
12	22X31A6612	10	6	8
13	22X31A6613	10	4	7
14	22X31A6614	10	9	10
15	22X31A6615	10	4	5
16	22X31A6616	10	5	9
17	22X31A6617	10	10	7
18	22X31A6618	10	10	7
19	22X31A6619	A	A	A
20	22X31A6620	10	2	4
21	22X31A6621	9	4	5
22	22X31A6622	10	10	10
23	22X31A6623	10	7	7
24	22X31A6624	10	7	9
25	22X31A6625	10	4	5
26	22X31A6626	10	5	10
27	22X31A6627	10	10	10
28	22X31A6628	10	6	7
29	22X31A6629	10	4	6
30	22X31A6630	10	8	10
31	22X31A6631	10	10	10
32	22X31A6632	10	4	6
33	22X31A6633	10	3	7
34	22X31A6634	10	8	10
35	22X31A6635	10	0	5
36	22X31A6636	10	10	10
37	22X31A6637	10	0	5
38	22X31A6638	10	9	10
39	22X31A6639	10	9	10
40	22X31A6640	10	0	5

41	22X31A6641	10	1	4
42	22X31A6642	10	9	9
43	22X31A6643	10	5	7
44	22X31A6644	10	0	5
45	22X31A6645	10	3	7
46	22X31A6646	10	1	7
47	22X31A6647	10	8	9
48	22X31A6648	10	4	7
49	22X31A6649	10	8	8
50	22X31A6650	10	5	7
51				
Target set by the faculty / HoD		6.00	6.00	6.00
Number of students performed above the target		48	25	36
Number of students attempted		50	50	50
Percentage of students scored more than target		96%	50%	72%

CO Mapping with Exam Questions:

CO - 1	y	y	Y
CO - 2	y	y	Y
CO - 3	y	y	Y
CO - 4			
CO - 5			
CO - 6			

% Students Scored >Target %	96%	50%	72%
-----------------------------	-----	-----	-----

CO Attainment based on Exam Questions:

CO - 1	96%	50%	72%
CO - 2	96%	50%	72%
CO - 3	96%	50%	72%
CO - 4			
CO - 5			
CO - 6			

CO	Intrnal practical	E+E+R	Overall	Level
CO-1	73%	72%	73%	3
CO-2	73%	72%	73%	3
CO-3	73%	72%	73%	3
CO-4				
CO-5				
CO-6				

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal 1 Examination) = 3

R+O+A : RECORD+OBSERVATION+ATTANDANCE

V+V: VIVA VOICE

E+E+R:EXPERIMENT WRITE UP+EXECUTION+RESULT



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities and Sciences

Course Outcome Attainment (Internal Examination-2)

Name of the faculty : K.RAJASHEKHAR Academic Year: 2022-2023
Branch & Section: AI&ML-A Examination: II Internal
Lab Course Name: Basic Electrical Engineering Lab Year/semester I/II

S.No	HT No.	R+O+A	V+V	E+E+R	ppt
Max. Marks ==>		10	10	10	10
1	22X31A6601	10	8	10	10
2	22X31A6602	10	10	10	10
3	22X31A6603	10	7	10	10
4	22X31A6604	10	6	7	10
5	22X31A6605	10	6	7	10
6	22X31A6606	10	5	7	10
7	22X31A6607	10	5	7	10
8	22X31A6608	10	9	10	10
9	22X31A6609	10	6	7	10
10	22X31A6610	10	4	5	10
11	22X31A6611	A	A	A	A
12	22X31A6612	10	5	7	10
13	22X31A6613	10	5	7	10
14	22X31A6614	10	9	10	10
15	22X31A6615	10	4	7	10
16	22X31A6616	10	8	10	10
17	22X31A6617	10	5	5	10
18	22X31A6618	10	9	10	10
19	22X31A6619	10	4	5	10
20	22X31A6620	10	5	5	10
21	22X31A6621	10	5	4	10
22	22X31A6622	10	10	10	10
23	22X31A6623	10	7	8	10
24	22X31A6624	10	7	8	10
25	22X31A6625	10	5	7	10
26	22X31A6626	10	10	10	10
27	22X31A6627	10	10	10	10
28	22X31A6628	10	5	7	10
29	22X31A6629	10	6	8	10
30	22X31A6630	10	9	10	10
31	22X31A6631	10	8	10	10
32	22X31A6632	10	5	8	10
33	22X31A6633	10	8	8	10
34	22X31A6634	10	9	9	10
35	22X31A6635	10	5	5	10
36	22X31A6636	10	6	9	10
37	22X31A6637	10	5	9	10
38	22X31A6638	10	10	10	10
39	22X31A6639	10	10	8	10
40	22X31A6640	A	A	A	A
41	22X31A6641	10	5	7	10
42	22X31A6642	10	10	10	10

43	22X31A6643	10	7	8	10
44	22X31A6644	10	4	6	10
45	22X31A6645	10	10	7	10
46	22X31A6646	10	8	10	10
47	22X31A6647	10	10	10	10
48	22X31A6648	10	9	9	10
49	22X31A6649	10	8	10	10
50	22X31A6650	10	9	10	10
51					
Target set by the faculty / HoD	6.00	6.00	6.00	6.00	6.00
Number of students performed above the target	48	31	42	48	
Number of students attempted	50	50	50	50	
Percentage of students scored more than target	96%	62%	84%	96%	

CO Mapping with Exam Questions:

CO - 1				
CO - 2				
CO - 3				
CO - 4	y	y	Y	y
CO - 5	y	y	Y	y
CO - 6	y	y	Y	y

CO Attainment based on Exam Questions:

CO - 1				
CO - 2				
CO - 3				
CO - 4	96%	62%	84%	96%
CO - 5	96%	62%	84%	96%
CO - 6	96%	62%	84%	96%

CO	Intrnal practical	E+E+R	ppt	Overall	Level
CO-1					
CO-2					
CO-3					
CO-4	79%	84%	96%	86%	3
CO-5	79%	84%	96%	86%	3
CO-6	79%	84%	96%	86%	3

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal 2 Examination) = **3**

R+O+A : RECORD+OBSERVATION+ATTANDANCE

V+V: VIVA VOICE

E+E+R:EXPERIMENT WRITE UP+EXECUTION+RESULT

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities and Sciences

Course Outcome Attainment



Name of the faculty : K.RAJASHEKHAR

Academic Year: 2022-2023

Branch & Section: AI&ML-A

Year / Semester: I/II

Lab Course Name: Basic Electrical Engineering Lab

Course Outcomes	1st Internal Exam	2nd Internal Exam	Internal Exam	University Exam	Attainment Level
CO1	3.00		3.00	3.00	3.00
CO2	3.00		3.00	3.00	3.00
CO3	3.00		3.00	3.00	3.00
CO4		3.00	3.00	3.00	3.00
CO5		3.00	3.00	3.00	3.00
CO6		3.00	3.00	3.00	3.00
Internal & University Attainment:			3.00	3.00	
Weightage			40%	60%	
CO Attainment for the course (Internal, University)			1.20	1.80	
CO Attainment for the course (Direct Method)			3.00		

Overall course attainment level

3.00



SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Humanities and Sciences Program Outcome Attainment (from Course)

Name of Faculty: K.RAJASHEKHAR Academic Year: 2022-2023
 Branch & Section: AI&ML-A Year / Semester: I/II
 Course Name: Basic Electrical Engineering Lab

CO-PO mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	2	1	-	-	-	-	2	1	-	2	-	-
CO2	3	3	1	2	1	-	-	-	2	1	-	2	-	-
CO3	3	-	-	-	1	-	-	-	2	-	-	3	-	-
CO4	2	3	1	-	1	1	-	-	3	-	-	2	-	-
CO5	2	3	1	-	1	1	-	-	3	-	-	2	-	-
CO6	2	3	1	-	1	1	-	-	3	-	-	2	-	-
Course	2.50	3.00	1.20	1.50	1.00	1.00			2.50	1.00		2.17		

CO	Course Outcome Attainment
	3.00
CO1	3.00
CO2	3.00
CO3	3.00
CO4	3.00
CO5	3.00
CO6	3.00
Overall course attainment level	3.00

PO-ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	2.50	3.00	1.20	1.50	1.00	1.00			2.50	1.00		2.17

CO contribution to PO - 33%, 67%, 100% (Level 1/2/3)