



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 – EE102ES**

**I B. Tech Semester-I  
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.



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<b>Academic Year</b>	2022-2023
<b>Name of the Physical laboratory:</b>	BASIC ELECTRICAL ENGINEERING LAB
<b>Course Code</b>	EE202ES
<b>Programme</b>	B.Tech
<b>Year &amp; Semester</b>	I & I
<b>Branch &amp; Section</b>	CSE-A
<b>Regulation</b>	BR22
<b>Room No</b>	D204 & A005
<b>Name of the Lab Incharge</b>	S.NISCHALA
<b>Name of the Faculty Incharge</b>	K.RAJASHEKHAR

## Index of Lab File

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2	Programme outcomes
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## 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.

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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.

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## B.Tech. in COMPUTER SCIENCE AND ENGINEERING 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.	CH103BS	Engineering Chemistry	3	1	0	4
3.	CS103ES	Programming for Problem Solving	3	0	0	3
4.	EE101ES	Basic Electrical Engineering	2	0	0	2
5.	ME101ES	Computer Aided Engineering Graphics	1	0	4	3
6.	CS106ES	Elements of Computer Science & Engineering	0	0	2	1
7.	CH106BS	Engineering Chemistry Laboratory	0	0	2	1
8.	CS107ES	Programming for Problem Solving Laboratory	0	0	2	1
9.	EE102ES	Basic Electrical Engineering Laboratory	0	0	2	1
		Induction Program				
		<b>Total</b>	<b>12</b>	<b>2</b>	<b>12</b>	<b>20</b>

#### I Year II Semester

S. No.	Course Code	Course	L	T	P	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	AP202BS	Applied Physics	3	1	0	4
3.	ME202ES	Engineering Workshop	0	1	3	2.5
4.	EN204HS	English for Skill Enhancement	2	0	0	2
5.	EC201ES	Electronic Devices and Circuits	2	0	0	2
6.	AP205BS	Applied Physics Laboratory	0	0	3	1.5
7.	CS201ES	Python Programming Laboratory	0	1	2	2
8.	EN207HS	English Language and Communication Skills Laboratory	0	0	2	1
9.	CS203ES	IT Workshop	0	0	2	1
10.	*MC201ES	Environmental Science	3	0	0	0
		<b>Total</b>	<b>13</b>	<b>4</b>	<b>12</b>	<b>20</b>



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## BASIC ELECTRICAL ENGINEERING LABORATORY

(Course Code: EE102ES)

**B.Tech. I Year I 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, 4<sup>th</sup> Edition, 2019.
2. MS Naidu and S Kamakshiah, "Basic Electrical Engineering", Tata McGraw Hill, 2<sup>nd</sup> Edition, 2008.



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## COURSE OUTCOMES

**Course Name: Basic Electrical Engineering Lab (C119)**

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

CO No	DESCRIPTION
C119.1	Apply basic circuit laws and simplify the network using reduction techniques. (Application)
C119.2	Understand time domain analysis, resonance in RLC parameters and evaluate impedance in RLC circuit (Knowledge)
C119.3	Understand the working concept , Select range of apparatus based on the ratings of different machines like transformers and motors (Knowledge)
C119.4	Determine efficiency and regulation of transformers by various test (Evaluation)
C119.5	Determine the performance characteristics of dc shunt motor. (Evaluation)
C119.6	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
C119.1	3	3	2	1	-	-	-	-	2	1	-	2	-	-
C119.2	3	3	1	2	1	-	-	-	2	1	-	2	-	-
C119.3	3	-	-	-	1	-	-	-	2	-	-	3	-	-
C119.4	2	3	1	-	1	1	-	-	3	-	-	2	-	-
C119.5	2	3	1	-	1	1	-	-	3	-	-	2	-	-
C119.6	2	3	1	-	1	1	-	-	3	-	-	2	-	-
<b>PO Avg</b>	<b>2.5</b>	<b>3</b>	<b>1.2</b>	<b>1.5</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>2.5</b>	<b>1</b>	<b>-</b>	<b>2.17</b>	<b>-</b>	<b>-</b>

3-High

2-Medium

1-Low



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## 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





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**Class: CSE-A**

**Semester: I**

**W.E.F-14-11-2022**

**LH:-D-107**

	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	PPS LAB			<b>L U N C H</b>	BEE	EC	PPS	PPS(T)/EC(T)
TUE	BEE	PPS	M&C		BEE/EC LAB			M&C(T)/BEE(T)
WED	EG PRACTICE				BEE	M&C	ECSE	LIB
THU	PPS	EC	BEE		PPS	M&C	BEE	EC(T)/PPS(T)
FRI	ECSE	EC	M&C		EG PRACTICE			BEE(T)/M&C(T)
SAT	BEE/EC LAB				PPS	EC	M&C	EG(T)

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
MA101BS	Matrices and Calculus	B.RAMADEVI	ME101ES	Computer Aided Engineering Graphics	M.YADAGIRI
CH103BS	Engineering Chemistry	Dr.D.PREMALATHA	CH106BS	Engineering Chemistry Lab	O.SUBHASHINI/ Dr.D.PREMALATHA
CS103ES	Programming for Problem Solving	D.SWAPNA	CS107ES	Programming for Problem Solving Lab	D.SWAPNA/B.RAJASHWARI
EE101ES	Basic Electrical Engineering	K.RAJASHEKAR	EE102ES	Basic Electrical Engineering Lab	K.RAJASHEKAR/ MP.REENA
CS106ES	Elements of Computer Science & Engineering	J.PUJITHA			

*[Signature]*  
Class In-Charge

*Ch. Saitha*  
Time Table Coordinator

*[Signature]*  
Head of The Department



**Dr. R. YADAGIRI RAO**  
 M.Sc., B.Ed., M.Tech(CSE), Ph.D.  
 Head of the Department  
 Department of H&S  
 SRI INDU INSTITUTE OF ENGG & TECH  
 Sheriguda(V), Ibrahimpatnam (M), R.R. Dist., Telangana

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**X3**

**BR22**

## **Lab External Question paper**

Year & Semester: I-I

Branch: CSE

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)



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## BEE Lab External Time Table Examination Branch

A.Y. : 2022-23

SEM-I

DATE	Day	Branch	Session	HT.No	Total No of Students
11-3-2023	SATURDAY	DS	FN	22X31A6701 TO 22X31A6764	64
13-3-2023	MONDAY	CSE-A	FN	22X31A0501 TO 22X31A0565	65
14-3-2023	TUESDAY	CSE-B	FN	22X31A0566 TO 22X31A05D0	65
14-3-2023	TUESDAY	CYBER SECURITY	AN	22X31A6201 TO 22X31A6262	62
15-3-2023	WEDNESDAY	CSE-C	FN	22X31A05D1 TO 22X31A05J1	61

  
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## BEE Lab External Time Table with examiners

A.Y. : 2022-23

SEM-I

DATE	Day	Branch	Session	HT.No	Total No of Students	Remarks	
						Internal Examiner	External Examiner
11-3-2023	SATURDAY	DS	FN	22X31A6701 TO 22X31A6764	64	M.NAGA RAJU (9640269828)	Mr.Suresh
13-3-2023	MONDAY	CSE-A	FN	22X31A0501 TO 22X31A0565	65	K.RAJASHE KHAR (8074465493)	Ms.Ch.Laxmi
14-3-2023	TUESDAY	CSE-B	FN	22X31A0566 TO 22X31A05D0	65	MP.REENA (9160504581)	Mr.Basav Reddy
14-3-2023	TUESDAY	CYBER SECURITY	AN	22X31A6201 TO 22X31A6262	62	S.NISCHALA (9912482689)	Mr.P.S.Reddy
15-3-2023	WEDNESDAY	CSE-C	FN	22X31A05D1 TO 22X31A05J1	61	MP.REENA (9160504581)	Ms.Ratna Kishori



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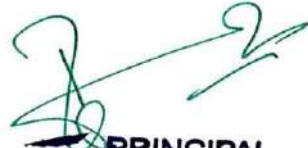
Website: <https://siiet.ac.in/>

## 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				L U N C H	I BTECH I SEM DATA SCIENCE			
TUE	I BTECH I SEM CSE-B				I BTECH I SEM CSE-A			
WED	I BTECH I SEM CSE-C				I BTECH I SEM CYBER SECURITY			
THU	I BTECH I SEM CSE-B				I BTECH I SEM DATA SCIENCE			
FRI	I BTECH I SEM CYBER SECURITY							
SAT	I BTECH I SEM CSE-A				I BTECH I SEM CSE-C			

  
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## **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



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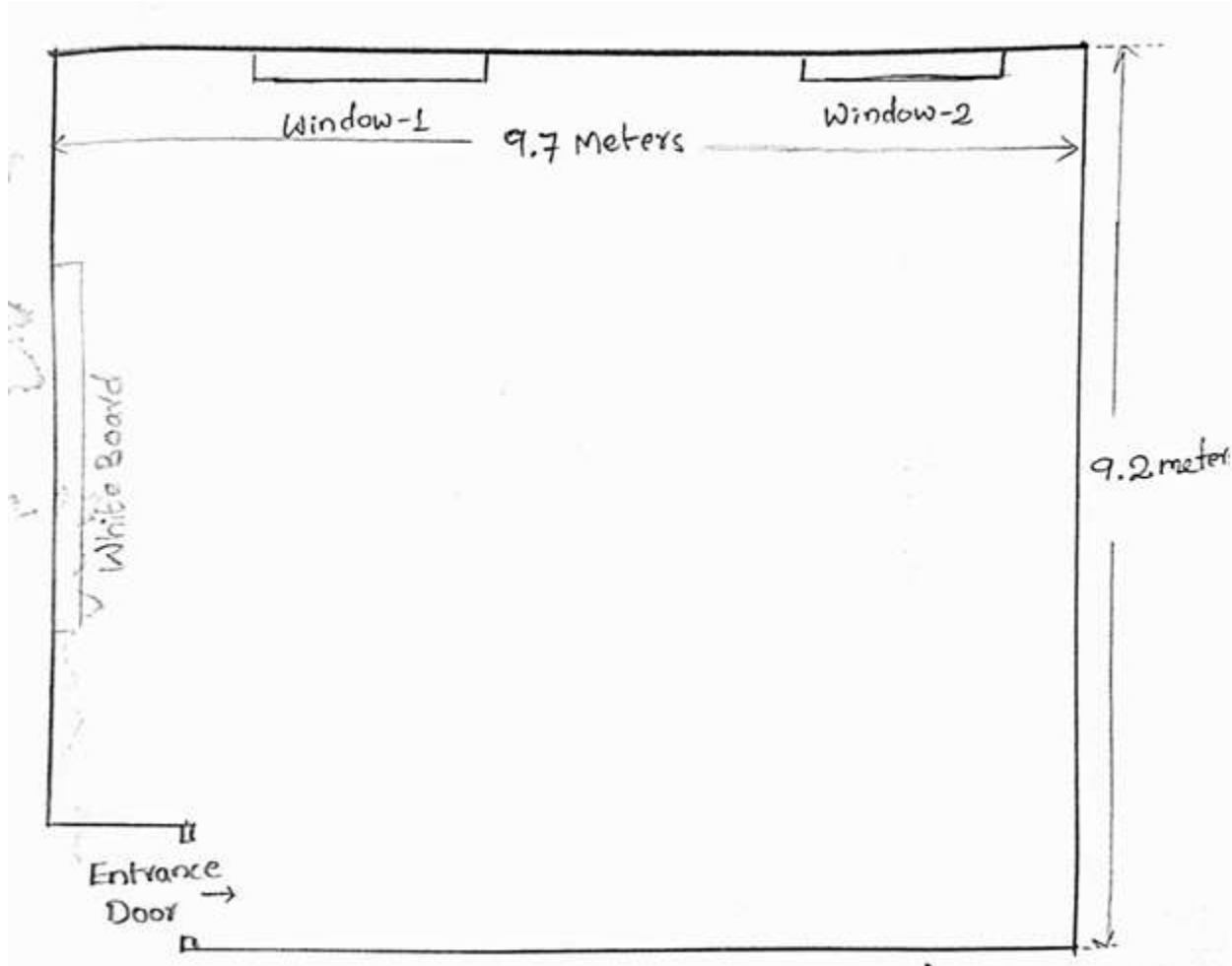
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Website: <https://siiet.ac.in/>

## 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



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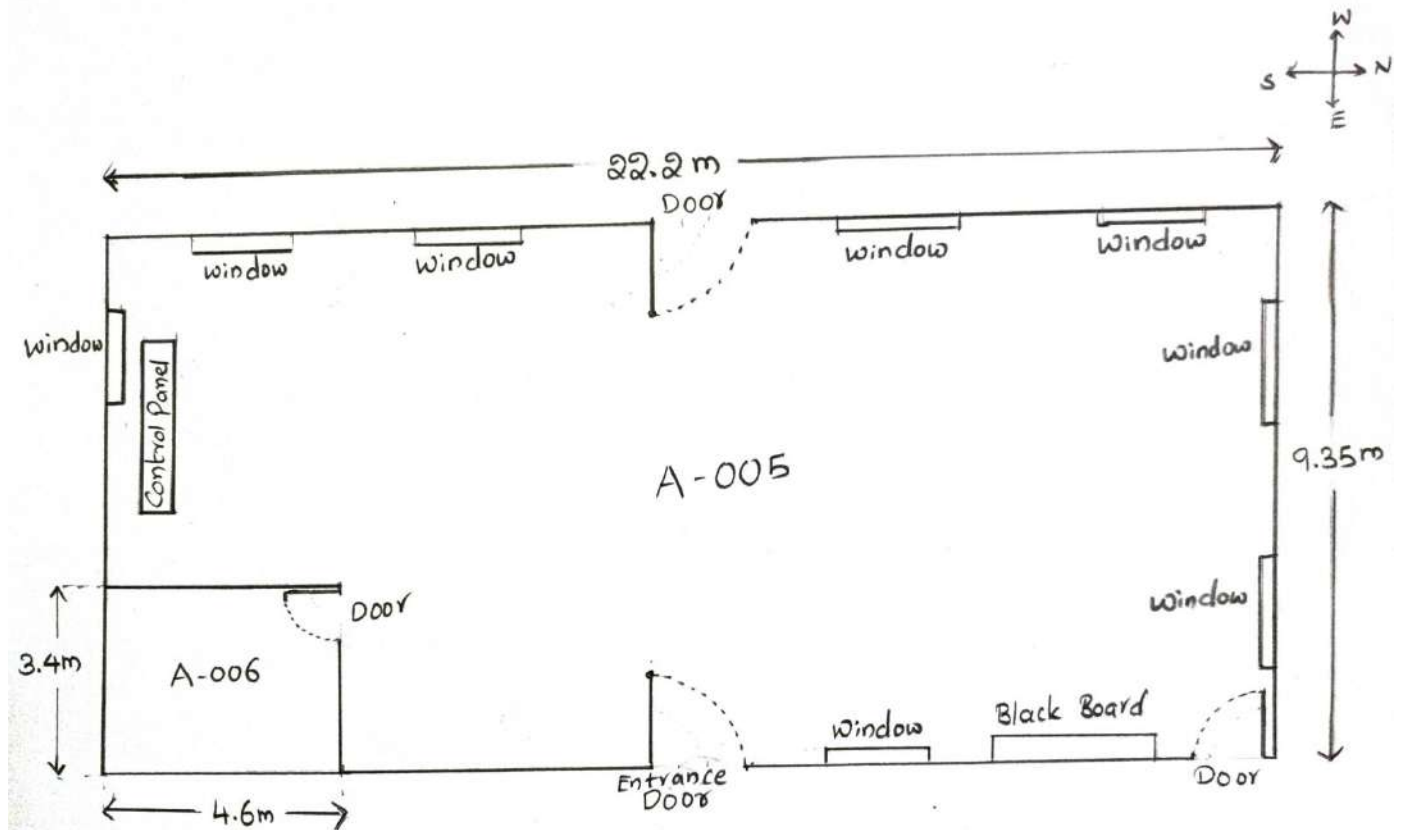
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Website: <https://siiet.ac.in/>

## 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)

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(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/>

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## 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: CSE-A Examination: I Internal  
Lab Course Name: Basic Electrical Engineering Lab Year/semester I/I

S.No	HT No.	R+O+A	V+V	E+E+R
Max. Marks ==>		10	10	10
1	22X31A0501	8	5	8
2	22X31A0502	10	9	10
3	22X31A0503	8	4	9
4	22X31A0504	10	5	9
5	22X31A0505	10	9	8
6	22X31A0506	10	7	9
7	22X31A0507	8	5	8
8	22X31A0508	10	9	10
9	22X31A0509	9	6	8
10	22X31A0510	9	8	9
11	22X31A0511	9	5	8
12	22X31A0512	9	5	9
13	22X31A0513	9	5	8
14	22X31A0514	A	A	A
15	22X31A0515	9	7	8
16	22X31A0516	9	5	8
17	22X31A0517	9	5	8
18	22X31A0518	8	5	8
19	22X31A0519	10	5	8
20	22X31A0520	9	9	6
21	22X31A0521	9	5	8
22	22X31A0522	8	5	8
23	22X31A0523	10	9	10
24	22X31A0524	8	5	8
25	22X31A0525	8	5	8
26	22X31A0526	10	10	9
27	22X31A0527	8	5	8
28	22X31A0528	10	6	7
29	22X31A0529	10	10	9
30	22X31A0530	10	7	8
31	22X31A0531	10	9	8
32	22X31A0532	A	A	A
33	22X31A0533	10	10	9
34	22X31A0534	6	5	8
35	22X31A0535	6	5	8
36	22X31A0536	10	9	8
37	22X31A0537	9	8	8
38	22X31A0538	6	5	8
39	22X31A0539	8	5	8
40	22X31A0540	8	5	8
41	22X31A0541	9	5	8
42	22X31A0542	8	9	8
43	22X31A0543	9	5	8
44	22X31A0544	9	5	8
45	22X31A0545	10	7	8
46	22X31A0546	9	5	8
47	22X31A0547	10	5	8
48	22X31A0548	6	5	8

49	22X31A0549	10	10	10
50	22X31A0550	10	9	10
51	22X31A0551	10	7	8
52	22X31A0552	10	9	8
53	22X31A0553	9	8	7
54	22X31A0554	9	7	8
55	22X31A0555	9	5	8
56	22X31A0556	9	5	8
57	22X31A0557	9	5	8
58	22X31A0558	10	9	8
59	22X31A0559	10	6	9
60	22X31A0560	9	5	8
61	22X31A0561	9	5	8
62	22X31A0562	10	8	8
63	22X31A0563	10	7	8
64	22X31A0564	10	5	8
65	22X31A0565	9	4	8
Target set by the faculty / HoD		6.00	6.00	6.00
Number of students performed above the target		63	29	63
Number of students attempted		65	65	65
Percentage of students scored more than target		97%	45%	97%

**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 %	97%	45%	97%
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**CO Attainment based on Exam Questions:**

CO - 1	97%	45%	97%
CO - 2	97%	45%	97%
CO - 3	97%	45%	97%
CO - 4			
CO - 5			
CO - 6			

CO	Intrnal practical	E+E+R	Overall	Level
CO-1	71%	97%	84%	3
CO-2	71%	97%	84%	3
CO-3	71%	97%	84%	3
CO-4				
CO-5				
CO-6				

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal I 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: CSE-A Examination: II Internal  
Lab Course Name: Basic Electrical Engineering Lab Year/semester I/I

S.No	HT No.	R+O+A	V+V	E+E+R	PPT
<b>Max. Marks ==&gt;</b>		<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
1	22X31A0501	10	8	7	10
2	22X31A0502	10	8	7	10
3	22X31A0503	10	5	5	10
4	22X31A0504	10	9	10	10
5	22X31A0505	10	5	9	10
6	22X31A0506	10	5	8	10
7	22X31A0507	10	4	7	10
8	22X31A0508	10	9	10	10
9	22X31A0509	10	5	10	10
10	22X31A0510	10	5	7	10
11	22X31A0511	10	6	8	10
12	22X31A0512	10	5	9	10
13	22X31A0513	10	5	7	10
14	22X31A0514	A	A	A	A
15	22X31A0515	10	6	8	10
16	22X31A0516	10	4	6	10
17	22X31A0517	10	5	7	10
18	22X31A0518	10	4	5	10
19	22X31A0519	10	4	7	10
20	22X31A0520	10	5	5	10
21	22X31A0521	10	8	10	10
22	22X31A0522	7	5	7	10
23	22X31A0523	10	9	10	10
24	22X31A0524	10	5	5	10
25	22X31A0525	10	4	5	10
26	22X31A0526	10	5	6	10
27	22X31A0527	10	5	5	10
28	22X31A0528	10	5	9	10
29	22X31A0529	10	9	10	10
30	22X31A0530	10	6	10	10
31	22X31A0531	10	9	10	10
32	22X31A0532	A	A	A	A
33	22X31A0533	10	9	10	10
34	22X31A0534	10	5	5	10
35	22X31A0535	10	4	5	10
36	22X31A0536	10	9	10	10
37	22X31A0537	9	5	5	10
38	22X31A0538	10	5	5	10
39	22X31A0539	10	5	5	10
40	22X31A0540	10	9	10	10
41	22X31A0541	10	8	10	10
42	22X31A0542	10	8	10	10
43	22X31A0543	10	7	6	10
44	22X31A0544	10	8	10	10
45	22X31A0545	10	9	10	10
46	22X31A0546	10	6	6	10

47	22X31A0547	10	9	10	10
48	22X31A0548	10	4	5	10
49	22X31A0549	10	9	10	10
50	22X31A0550	10	9	10	10
51	22X31A0551	10	9	10	10
52	22X31A0552	10	8	10	10
53	22X31A0553	10	4	6	10
54	22X31A0554	10	8	10	10
55	22X31A0555	10	5	5	10
56	22X31A0556	10	4	5	10
57	22X31A0557	10	5	5	10
58	22X31A0558	10	8	10	10
59	22X31A0559	10	8	10	10
60	22X31A0560	10	8	10	10
61	22X31A0561	10	5	7	10
62	22X31A0562	10	9	10	10
63	22X31A0563	10	9	10	10
64	22X31A0564	10	5	5	10
65	22X31A0565	10	6	5	10
Target set by the faculty / HoD		6.00	6.00	6.00	6.00
Number of students performed above the target		63	32	46	63
Number of students attempted		65	65	65	65
Percentage of students scored more than target		97%	49%	71%	97%

**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	97%	49%	71%	97%
CO - 5	97%	49%	71%	97%
CO - 6	97%	49%	71%	97%

CO	Intrnal practical	E+E+R	ppt	Overall	Level
CO-1					
CO-2					
CO-3					
CO-4	73%	71%	97%	80%	3
CO-5	73%	71%	97%	80%	3
CO-6	73%	71%	97%	80%	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 (University Examinations)

Name of the faculty : K.RAJASHEKHAR

Academic Year:

2022-2023

Branch & Section: CSE-A

Year / Semester:

I/I

Lab Course Name: Basic Electrical Engineering Lab

S.No	Roll Number	Marks Secured
1	22X31A0501	52
2	22X31A0502	59
3	22X31A0503	46
4	22X31A0504	56
5	22X31A0505	50
6	22X31A0506	50
7	22X31A0507	50
8	22X31A0508	59
9	22X31A0509	51
10	22X31A0510	49
11	22X31A0511	52
12	22X31A0512	55
13	22X31A0513	46
14	22X31A0514	A
15	22X31A0515	49
16	22X31A0516	46
17	22X31A0517	51
18	22X31A0518	52
19	22X31A0519	49
20	22X31A0520	47
21	22X31A0521	53
22	22X31A0522	46
23	22X31A0523	54
24	22X31A0524	45
25	22X31A0525	45
26	22X31A0526	59
27	22X31A0527	46
28	22X31A0528	54
29	22X31A0529	59
30	22X31A0530	58
31	22X31A0531	59
32	22X31A0532	A
33	22X31A0533	56
34	22X31A0534	46
Class Average mark		52
Number of students performed above the target		34
Number of successful students		65
Percentage of students scored more than target		52%
<b>Attainment level</b>		<b>3</b>

S.No	Roll Number	Marks Secured
35	22X31A0535	46
36	22X31A0536	46
37	22X31A0537	54
38	22X31A0538	46
39	22X31A0539	52
40	22X31A0540	55
41	22X31A0541	56
42	22X31A0542	56
43	22X31A0543	54
44	22X31A0544	56
45	22X31A0545	59
46	22X31A0546	46
47	22X31A0547	54
48	22X31A0548	46
49	22X31A0549	59
50	22X31A0550	56
51	22X31A0551	56
52	22X31A0552	59
53	22X31A0553	54
54	22X31A0554	54
55	22X31A0555	49
56	22X31A0556	46
57	22X31A0557	46
58	22X31A0558	59
59	22X31A0559	55
60	22X31A0560	53
61	22X31A0561	54
62	22X31A0562	54
63	22X31A0563	56
64	22X31A0564	53
65	22X31A0565	54
<b>Attainment Level</b>		<b>% students</b>
1		40%
2		50%
3		60%

# SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities and Sciences

## Course Outcome Attainment



Name of the faculty : K.RAJASHEKHAR  
Branch & Section: CSE-A  
Lab Course Name: Basic Electrical Engineering Lab

Academic Year: 2022-2023  
Year / Semester: I/I

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
<b>Internal &amp; University Attainment:</b>			3.00	3.00	
<b>Weightage</b>			40%	60%	
<b>CO Attainment for the course (Internal, University)</b>			1.20	1.80	
<b>CO Attainment for the course (Direct Method)</b>			3.00		

Overall course attainment level

**3.00**

