NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE PLAN – PART I			
Name of the programme and specialization	I Year B.Tech, EEE		
Course Title	INTRODUCTION TO ELECTRICAL AND ELECTRONICS ENGINEERING		
Course Code	EEIR15	No. of Credits	02
Course Code of Pre-requisite subject(s)	NIL		
Session	January 2022	Section (if, applicable)	B
Name of Faculty	Dr. Aneesa Farhan M A	Department	EEE
Email	aneesa@nitt.edu aneesafma@gmail.com	Telephone No.	7598164452 8015877137
Name of Course Coordinator(s) (if, applicable)	N A		
Course Type (please tick appropriately)	General Institute Requirement (GIR) ☐ Branch Specific Course		

Syllabus (approved in BoS)

History, major inventions, scope, significance and job opportunities in electrical and electronics engineering, brief overview of various energy resources.

Basics of energy conversion, Power apparatus used in power generation, transmission and distribution, Power apparatus used in various industries.

Basic ideas about utility supply, electrical tariff, energy audit and importance of energy saving. Introduction to different types of electrical circuits, house wiring, electronic circuits for signal processing, specifications of electronic components.

Brief overview of curriculum, laboratories and various software packages, electronic testing and measuring equipment.

COURSE OBJECTIVES

This course facilitates the students to get a comprehensive exposure to electrical and electronics engineering

MAPPING OF COs with Pos

Course Outcomes	Programme Outcomes (PO) (Enter Numbers only)
Upon completion of the course, the students shall develop an insightful knowledge on various fundamental elements of electrical and electronics engineering	1,3,8,13

COURSE PLAN – PART II			
COURSE TEACHING AND LEARNING ACTIVITIES			
S.No.	Week/Contact Hours	Topic	Mode of Delivery
1	Week 1 (2 Lectures) 04-08 April	Introduction to the course, History,	Online lecture
2	Week 2(2 Lectures) 11-16 April	major inventions, scope, significance and job opportunities in electrical and electronics engineering,	Online lecture
3	Week 3(2 Lectures) 18-22 April	brief overview of various energy resources	Online lecture
4	Week 4(2 Lectures) 25-29 April	Basics of energy conversion, Power apparatus used in power generation and distribution.	Online lecture
5	Week 5(3 Lectures) 02-07 May	Power apparatus used in various industries First Assessment Basic ideas about utility supply	Online lecture
6	Week 6(2 Lectures) 09-13 May	electrical tariff, energy audit	Online lecture
7	Week 7(2 Lectures) 16-20 May	importance of energy saving.	Online lecture
8	Week 8(3 Lectures) 23-28 May	Introduction to different types of electrical circuits house wiring,	Online lecture
9	Week 9(2 Lectures) 30 May -03 June	Second Assessment	Online lecture
10	Week 10(2 Lectures) 06-10 June	electronic circuits for signal processing specifications of electronic components	Online lecture

11	Week 11(3 Lectures) 13 -18 June	Brief overview of curriculum, laboratories and various software packages	**Online lecture**
12	Week 12(2 Lectures) 20-24 June	electronic testing and measuring equipment.	**Online lecture**
13	Week 12(1 Lectures) 27 -29 June	**Compensation Assessment**	**Online lecture**

COURSE ASSESSMENT METHODS

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1.	**Assessment I (CT1)**	Week5 02-07 May	1 hour	**20%**
2.	**Assessment II(CT2)**	Week 9 30 May -03 June	1 hour	**20%**
3.	**Assssment III**	Surprise test / report / viva/assignment -	-	**30%**
	Compensation Assessment (Written test)	Week 12 27-29 June	1hour	**80% of CT1/CT2**
4	**Final Assessment**	4- 9 July	2 hours	**30%**

ESSENTIAL READINGS : Textbooks, reference books Website addresses, journals, etc

1. Clayton Paul, Syed A Nasar and Louis Unnewehr, 'Introduction to Electrical Engineering', 2nd Edition, McGraw-Hill, 1992.

2. Kothari D.P. & Nagrath I.J., 'Basic Electrical Engineering', 2nd Edition, Tata McGraw-Hill, 2001.

3. P.S. Dhogal, 'Basic Electrical Engineering – Vol. I& II', 42nd Reprint, McGraw-Hill, 2012.

COURSE EXIT SURVEY

- Feedback from the students during class committee meetings
- Anonymous feedback through questionnaire

COURSE POLICY

- All students are expected to attend all the laboratory sessions

Compensation Examination shall have 80% weightage

ATTENDANCE POLICY (A uniform attendance policy as specified below shall be followed)

- At least 75% attendance in each course is mandatory.
- A maximum of 10% shall be allowed under On Duty (OD) category.
- Students with less than 65% of attendance shall be prevented from writing the final assessment and shall be awarded 'V' grade.

ACADEMIC DISHONESTY & PLAGIARISM

- Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- The departmental disciplinary committee including the course faculty member, PAC chairperson and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student is found guilty. The report shall be submitted to the Academic office.
- The above policy against academic dishonesty shall be applicable for all the programmes.

ADDITIONAL INFORMATION, IF ANY

FOR APPROVAL

Course Faculty _____ **CC- Chairperson** _____ **HOD** _____

Aneesa Farhan

(Dr. S. MAHESHWARI)